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STRANDED COSTS

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Through the end of this century, the most critical regulatory issue facing electric utilities will be stranded costs, which can be defined as those costs that the utilities currently are permitted to recover through their rates but whose recovery may be impeded or prevented by the advent of competition in the industry. These costs represent expenditures incurred by a utility in the past in meeting its obligation to serve all customers within the area in which it held an exclusive franchise, granted to it under the traditional regulatory regime. Costs that face the prospect of being stranded include, among others, assets used for electricity generation, power and fuel purchasing expenditures required under long-term contracts, "regulatory assets" consisting of expenses whose recovery has been deferred to keep rates temporarily from rising, outlays required of the utilities by regulators to meet a number of social goals such as subsidies to low-income users, and incentives for supply of energy from renewable sources. These outlays have been approved by the regulatory agencies, and many were imposed on the utilities by those agencies. They have also served to hold down prices to electricity customers in the past.

However, the entry of competitors who are not burdened by such inherited expenses can prevent the utilities from recovering those costs. The desirability of such a scenario has been

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questioned on the basis of both equity and economic efficiency. At least two major types of inefficiency can result from failure to adopt a defensible policy dealing with stranded costs: they can divert business to less-efficient suppliers, whose higher operating costs are offset by freedom from any obligations imposed on the incumbent utility, and they can serve as a disincentive for future investment in the industry, condemning efficient suppliers to obsolescence and inadequate capacity.

Electric utilities in the United States may face \$200 billion or more in stranded costs as a result of the growth of independent power producers and the advent of wholesale and retail wheeling. In 1994, the Federal Energy Regulatory Commission (FERC) issued a notice of proposed rulemaking on stranded costs in the electric power industry in which it described the dilemma facing numerous utilities:

During the transition to a fully competitive wholesale power market, some utilities may incur stranded costs as wholesale customers leave their systems to purchase power elsewhere. A utility may have built facilities or entered into long-term fuel or purchased power supply contracts with the reasonable expectation, based on historical experience and the behavior of its customer, that its wholesale requirements contract to sell electric energy to that customer would be renewed, and that the customer would pay its proportionate share of long-term investments and other costs incurred. If the customer is able to obtain unbundled transmission service from the utility in order to reach other power suppliers, the utility may have "stranded costs." If the utility does not have an alternative buyer for the power previously sold to the departing wholesale requirements customer, or some other means of mitigating the stranded costs, the costs must be recovered from either the departing customer or the remaining customers or borne by the utility's shareholders.2

costs as "any legitimate, prudent and verifiable costs incurred by a public utility or a transmitting utility to provide service to a wholesale requirements customer that subsequently becomes, in whole or in part, an unbundled transmission services customer of that public utility or transmitting utility." Id. at 35,274. FERC defines retail stranded costs analo-

gously. Id. at 35,274-75.

^{1.} See Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Notice of Proposed Rulemaking, Dkt. No. RM-94-7-000, 59 Fed. Reg. 35,274, 35,278 (proposed June 29, 1994) [hereinafter Stranded Costs NOPR] (reporting estimates from tens of billions of dollars to \$200 billion); Am. Bar Ass'n, Annual Report, Section of Public UTILITY, COMMUNICATIONS AND TRANSPORTATION LAW 188 (1994) (estimating \$300 billion of stranded costs); NARUC Eyes Stranded Investment Jurisdictional Issues, Energy Rep., Mar. 7, 1994, at 129 (reporting \$200 billion to \$300 billion estimate by an investor-owned utility's vice president of corporate strategic planning).

2. Stranded Costs NOPR, supra note 1, at 35,276-77. FERC defines wholesale stranded

In this article, we explain why it generally benefits consumers for stranded costs to be recovered as part of the price of service. In part I of this article we discuss the efficiency justifications, and in part II the equity justifications, for recovery of stranded costs. In part III, we briefly discuss the takings implications of stranded costs. In part IV, we discuss a utility's duty to mitigate stranded costs.

I. EFFICIENCY

We will show presently the nature of the consumer interest in recovery of stranded costs by the electric utilities. But even if no arrangement were made to enable the utilities to recover the bulk of their stranded costs, some portions of these costs would continue to constitute inescapable obligations for these enterprises. With regulatory consent and encouragement, they have entered into long-term contracts that require them to use high-cost sources of energy and to purchase electricity from high-cost suppliers. They are expected by the industry to have the capacity to serve unexpected increases in demand. These, and the costs of a number of social obligations, are among the expenditures that the utilities cannot expect to escape, even though, under current arrangements, a number of other electricity generators have no such expenses.

The important point here is that this disparity in obligations between the utility and its competitors in electricity generation undermines the competitive market's ability to enforce efficiency in the industry. Rather than a competitor facing barriers to entry, the utility currently serving the market faces "incumbent burdens." Suppose that a particular utility is more efficient than a rival and consequently can generate electricity at an incremental cost that is ten percent lower than the rival's. If the utility's inherited and inescapable cost obligations are twenty percent of its incremental costs, its less efficient rival clearly will be able to underprice the utility, despite the rival's substantially higher incremental cost of producing the electricity. This form of bypass is obviously detrimental to the interests of consumers and the efficiency of the economy. Demand will be channeled to less efficient suppliers, leading to unnecessary resources use, reduced

^{3.} See Paul W. MacAvoy, Daniel F. Spulber & Bruce E. Stangle, Is Competitive Entry Free? Bypass and Partial Deregulation in Natural Gas Markets, 6 YALE J. ON Reg. 209, 210 (1989).

productivity, and higher real costs. This inefficient bypass is a clear impediment to the competitiveness of the economy, and in the long run it must result in increased costs to consumers.

In addition, the net result may be financial difficulty for the utility. The effective competition from less efficient rivals who are free from inherited costs that the utility cannot escape simply may prevent the utility from recovery of even those inherited costs that obligate it to continue the corresponding outlays in the present and the future.

The proper manner to deal with this issue is to arrange for recovery of stranded costs in a way that can be described as "competitively neutral." The policy must permit rival firms to succeed only on the basis of relative efficiency, undistorted by asymmetrical obligations inherited from the past. Our forthcoming book describes an arrangement that we believe is an appropriate and efficient way to deal with the matter.

It should be emphasized that the problem described in this section is not hypothetical. Already a number of customers, notably the larger users of electricity, are switching to suppliers who can provide the energy that these customers require at prices lower than those of the utilities, because these rival suppliers are free of any obligation toward the recovery of stranded costs. The threat to efficiency of operation of the industry is real, and its consequences are likely to be substantial.

A. Efficiency Grounds for Recovery of Stranded Costs

It will be shown next that recovery of stranded costs serves to protect the long-term interests of consumers, because failure to do so can undermine economic efficiency by raising the cost of capital to electric utilities above the competitive level, or by creating an enduring shortage in investment for them. It also will be shown that this is a necessary but transitory step in the change from a regulatory regime that, at least in some respects, has been in conflict with the requirements of the competitive market

^{4.} For example, in 1991 the Massachusetts Bay Transportation Authority, which operates the T subway in Boston, dropped New England Electric System as its supplier of electricity in favor of Boston Edison after the transit authority succeeded in having the Massachusetts legislature declare it to be a utility entitled to wholesale wheeling. See Massachusetts Elec. Co., 66 Fed. Energy Reg. Comm'n Rep. (CCH) ¶ 61,036 (1994); Will It Earn a Return, Will It Earn a Return? Its Fate Is Still Unlearned, Energy Rep., Jan. 17, 1994, at 5.

model to a new mode of mixed competition and regulation in which no such problem need arise again.

As we have seen, stranded costs arise because the advent of competition in the generation of electricity was not foreseen and probably not even foreseeable until very recently. Consequently, utility managements were led to undertake investments and to incur costs that they might not have chosen to undertake if they had known that competition and wholesale wheeling were to become prevalent. As already explained, considerable portions of those costs were incurred involuntarily by the utilities as a result of regulatory imposition of expensive public policy goals—such as requiring procurement from high-cost suppliers of power, the provision of low-cost service to impecunious customers, the award of subsidies to suppliers of energy from renewable sources, and so forth.

In a competitive and unregulated market, of course, the costs engendered by such failures of foresight, whether they do or do not have a good explanation or excuse, nevertheless always are borne by the firm. Stockholders suffer any resulting losses, and they have nowhere to turn for protection from the burden.

Why, then, seeing that we have proposed to be guided in our analysis by the competitive market model, do we conclude that it is appropriate to provide for substantial restitution of the costs of those stranded investments that earlier regulation had not rejected, in advance of their acquisition, as imprudent? The answer, as we will explain in the following discussion, is that the restitution of stranded costs will help to rectify the problems that were caused by departures from traditional regulation. Restitution of stranded costs can ensure compliance with a fundamental precept of the competitive market model for regulation: that the regulator never take any step that precludes investors in the regulated firm from the ex ante expectation that earnings will be sufficient in the long run to return the investors' capital plus a competitive rate of return on that investment.

This is not to say that the free market ever guarantees such a return, nor does it mean that earnings will at all times be commensurate with this goal. During recessions earnings often will be lower than this target requires, while during prosperous times the shortfall can be made up for. Moreover, investors know that the firm someday may encounter difficulties, and that all of their investments may be lost. This prospect, however, is made up for

by the possibility that the firm will turn out to have performed better than might have been anticipated. Taking both the possibility of loss and that of gain into account, investors in a free competitive market will provide resources to the firm only if the actuarially expectable return is at the competitive level—offering, on the probabilistic average, repayment of the funds provided, plus a competitive rate of return on those funds, plus a suitable payment for the risk entailed in the investment.

The pertinent competitive market principle, then, is this: firms must offer investors an actuarially expected return of the magnitude just described. Competition will prevent investors from earning more than this, for if a higher return is promised, entry will drive down the price of the firm's product to the point where the rate of return is no higher than the competitive level. Moreover, the competitive ex ante return never will be lower than this because then investors would refuse to supply the firm with the capital resources it needs.

Under regulation as it was conducted in the past, such an arrangement with investors was ruled out. Regulators did try to offer investors the same sort of actuarially expected return that a competitive market provides, but other regulatory rules forced regulators to take an approach to the matter very different from the competitive market's. The reason is to be found in the regulator's ceilings on the earnings of the firm. Unlike the enterprise in an unregulated competitive market, the regulated utility was prohibited from earning (aside from small and temporary deviations) any more than a "fair rate of return" on its rate base. This meant that investors could be sure that, whatever the firm's efficiency performance, they never would realize a large and lucrative return. Having precluded extraordinarily generous returns to investors in firms under their jurisdiction, regulators undertook to make up for this deviation from the competitive norm by means of another offsetting arrangement. They implicitly committed themselves to protect the regulated firm from a broad class of losses as an offset to their preclusion of large profits. Because the firm generally was selected for regulation because it characteristically possessed market power whose exercise only the regulatory rules prevented, whenever costs rose unexpectedly or a loss threatened from any other source, the regulator could prevent it by loosening the constraint on the firm's market

power, permitting it to raise prices and enhance its revenues sufficiently.

It is this arrangement, to which we refer as the implicit regulatory compact, that enabled the regulators to reconcile their ceilings on the earnings of utilities with the requirement of the competitive market model that, in terms of actuarially expected value, prospective investors be offered a competitive rate of return on their investments.

Failure to permit recoupment of stranded costs clearly will violate the implicit regulatory compact. Aside from any inequity that this may entail, it is also a threat to economic efficiency because of its deterrent consequences for investment. It is true that it will be too late for current investors in the utilities to do anything in response to a prohibition of recoupment. But investors can learn the lesson and conclude that investment in electric utilities, with partial regulation continuing, is to be avoided assiduously in the future. More important, other prospective investors, seeing the compact abrogated, are certain to conclude that it may well be abrogated again whenever it is convenient for the regulators, and they too may take their resources elsewhere in the economy. The resulting shortage of capital for the electric industry, and the consequent impediments to maintenance, modernization, and needed expansion, hardly can benefit the long-term interests of consumers or contribute to the efficiency and competitiveness of the economy. In short, there is a compelling efficiency reason for regulators to permit substantial recoupment of stranded costs in the course of transition to competition. Of course, once that transition has been carried out, and excessive earnings are prevented either by market forces or flexible price caps rather than rate-of-return regulation, the regulation of the utility can move closer to the requirements of the full competitive market model, and the issue of stranded costs never need recur.

It has been argued that the preceding discussion is not compelling because investors have short memories and soon will forget a once-and-for-all abrogation of the regulatory compact that left them uncompensated for the stranded outlays they had undertaken in the past. We believe the evidence is insufficient to offer us any confidence that future investors simply will ignore past mistreatment and the risk that it can occur again in the future. If stranded costs were only modest in amount, that hypothesis might be credible. The fact that their magnitude is certainly in

the tens and probably in the hundreds of billions of dollars and threatens to cut deeply into the equity of current shareholders makes such a hypothesis implausible, and certainly one that cannot be relied upon with any degree of confidence.

Having asserted that payment for stranded costs is likely to be beneficial to consumers, it is appropriate to say a few words about this apparently implausible proposition—that consumers' interests are served by compensation for stranded costs and electricity prices (at least to some users) higher than they otherwise might have been, at least in the short run.

B. The Interests of Consumers in Cost Recovery

In the apportionment of the burden of stranded costs, the interests of the regulated firm and those of its customers are not always identical. The regulated firm, for example, may seek prices that exceed the competitive level and that contribute monopoly profits to the firm at the expense of its consumers. In that case, the interests of the two parties obviously conflict, and preventing the adoption of such prices is a legitimate task of regulation.

Nevertheless, there is a considerable range of decisions in which the interests of firm and consumers are entirely compatible, even though sometimes they may not appear to be so. A short-term view of the matter, for example, may suggest that the lower the prices charged, the better off consumers always will be. Certainly that can be true if low prices are achieved through low costs—a development beneficial to both of the parties.

Such low prices, however, also may entail inadequate service. If price reductions are imposed in a manner that prevents the firm from covering its costs—including, in particular, its cost of capital—the victory of consumers is entirely Pyrrhic. Their short-term gains will be more than offset by the future deterioration in service, for there is no way that the regulator or the courts can force investors to fund an uncompensatory enterprise. The market mechanism dooms such a firm to deterioration and ultimate extinction as funding is denied it for maintenance, replacement, modernization, and expansion of capacity, if expansion is required by growing demand. Rates granted to consumers by the regulatory process that are too low to permit the firm to earn a competitive rate of return on its capital funds, and therefore to

elicit the capital that it needs, are a gift that the community will regret in the future.

The fundamental principle that follows from all this is that the regulator's task is to ensure that rates are as low as reasonably possible while not interfering with the regulated firm's ability to acquire the capital that the long-term interests of consumers require it to invest if it is the more efficient supplier. If misguided regulation should violate that principle, the regulators will have shown that they are willing to adopt rules that are as severely damaging to the long-run interests of consumers as they are to those of the regulated firm.

II. EQUITY

Economics does not provide a firm basis for systematic conclusions on issues of justice and equity. The issue of stranded cost recovery nevertheless raises inescapable questions of fairness.⁵ Some advocates of competition argue that such considerations are irrelevant—that, just as suppliers under competition have no entitlement to recover their sunk or any other costs, so utility companies have no such entitlement either. Therefore, they argue, to the extent that competition henceforward makes it impossible for the utility companies to collect those costs from their customers, they should be forced to write them off. Utility managers, conscious of their responsibilities to shareholders, naturally disagree vehemently.

We already have set forth the several ingredients of the utilities' case for full recovery on equity grounds. Investors committed their capital, and the companies in turn have undertaken the very large investments and contractual commitments in fulfillment of their various public service obligations and have accepted regulatory limitations on their allowable rates of return in exchange for the promise of a reasonable opportunity to recover their prudently incurred costs. The most recent regulatory reforms that have played so large a role in admitting competition into the industry—including both the Public Utility Regulatory Policies Act (PURPA)⁶ and the 1992 Energy Policy Act⁷—re-

^{5.} This discussion is based on William J. Baumol, Paul L. Joskow & Alfred E. Kahn, The Challenge for Federal and State Regulators: Transition From Regulation to Efficient Competition in Electric Power 33-34 (Edison Electric Institute 1994).

^{6.} Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified in scattered sections of 16 U.S.C.).

tained that same arrangement and assurance: the model they envision is one in which the utility companies serve as "resource portfolio managers," responsible for the supply of electric services to their retail customers, whom they continue to serve on an exclusive basis, with the continuing implicit regulatory promise of the opportunity to recover their approved costs.

The consequent allocation of risk between investors and customers is, of course, different from its allocation in unregulated industries. Unregulated markets impose on investors the full costs of investments that turn out badly but allow them to retain all the profits of ventures that turn out well; under traditional utility regulation investors neither have borne much of the former risk nor enjoyed much of the latter benefits. Under both arrangements, however, the allocation has been and is symmetrical—with large risks of loss in unregulated industries balanced by large opportunities for gain and, in the utility industries, shareholders sheltered from the risk of large losses and correspondingly denied the opportunity for big gains. And utility customers have been in the corresponding opposite position—enjoying the major part of the fruits of economically successful utility ventures and underwriting the costs of the economically unsuccessful ones.

This allocation of investment risks under which utilities have made these investments and commitments has worked to the benefit of ratepayers for many decades. Even among the present portfolio of utility investments, most investment has turned out to be economically successful. The desire of ratepayers and their representatives in the present circumstances to be sheltered from the costs of past commitments that have not met expectations is, of course, understandable. But so far as the equities are concerned, it is important to recognize that the offering of such shelter by policy makers represents an attempted abandonment of symmetry—in effect, a desire to play the game of heads-we-win, tails-you-lose. A failure now of policy makers to ensure the companies at least some reasonable level of recovery of their regulatorily approved costs in any transition to competition would leave investors, in effect, with part—a very large part—of the value of their property expropriated by the change in the rules of the game.

^{7.} Pub. L. No. 102-486, 106 Stat. 2776 (1992) (codified in scattered titles of U.S.C.; see tables).

III. TAKINGS AND REGULATORY RISK

The possibility that the firm's investors will be precluded by regulation from obtaining a reasonable return could suggest that a "taking" of the utility's property has occurred, in violation of the Takings Clause of the Fifth Amendment. Purely as an economic matter, it is confiscatory to take someone's property by decree and without adequate compensation. This is equally true if it is the property of stockholders that is taken.

Even if the value of this property is not obvious, it can be described theoretically and estimated practically. Once again, the competitive market is usually the most helpful guide. In a competitive market, the investors in a firm that is to continue in business for the foreseeable future will be compensated, on average, just sufficiently to induce future investors to provide the capital needed for replacement, modernization, and necessary expansion. That compensation will be sufficient to achieve this effect, without any reduction in the market price of the company's stock that takes place solely to elicit the required capital.

In the process, over the lifetime of an investment, the correct competitive payment will be the amount that is just sufficient to yield the accumulation of capital that can replace the investment in question at the end of its economic life, and that, during the lifetime, will provide investors with the current competitive rate of return on investment of comparable risk. The actuarial value that investors in a competitive firm can expect to obtain at the time they make their investment will be this amount—no more and no less. Moreover, from the viewpoint of the long-run welfare of the firm's consumers, this is the optimal ex ante figure for compensation of investors. It is optimal because it will attract the amount of investment in the firm, current and future, that the interests of consumers require, and it will attract that investment at the lowest price (that is, at the lowest payment to investors) capable of eliciting those funds.

Consequently, any regulatory rules that prevent investors from receiving the amount of compensation just described constitutes economic confiscation. It is confiscation in terms of what investors legitimately can expect in the long run and, perhaps even more important, in terms of the benefits that the firm's consum-

^{8.} U.S. Const. amend. V ("nor shall private property be taken for public use without just compensation").

ers should receive in the long run. The confiscatory rules can take the form of disallowances from the firm's rate base, undue limitations on rate of return, elimination or erosion of a retail franchise without compensation for costs that it imposed upon the firm, or a variety of other restrictions imposed singly or in combination. Whatever the means by which such regulatory restrictions on investor compensation are imposed, they confiscate from consumers and investors alike what are legitimately theirs—the benefits that they can expect in any competitive market, and which only the caprice of the regulatory process denied them.

Although there is no perfect way of estimating the value that has been lost through such regulatory confiscation, the standard approaches to calculation of the cost of capital indicate the best way. The goal is to determine what stream of returns to investors will have a present value sufficient to provide for replacement of the assets of the firm as replacement is needed and will yield to investors the competitive rate of return on debt and equity given the risks inherent in the operations of the firm. Methods for estimation of the cost of capital figure for the firm in practice are well known. One also can estimate what the current replacement value of the assets of the firm is, a calculation that also is carried out in practice. These two calculations together provide the information needed to determine whether the returns permitted by a regulatory process are confiscatory. If they are, the two calculations permit an estimate of the amount of confiscation that is entailed.

Alternatively, one can seek to determine the returns currently permitted by market forces to comparable firms in competitive, unregulated markets. This second approach can be helpful, but it is complicated by the fact that regulated firms face a risk from which enterprises in unregulated markets are immune. That is the risk contributed by regulation itself—that regulatory policy can change, and change in ways that could not have been foreseen or foreseen only imperfectly, that the legitimate benefits of consumers and investors of the regulated firm will be confiscated, and so forth. Such regulatory risk is very real, but its magnitude is not easily evaluated.

Several observations are pertinent here. If no allowance is made for regulatory risk in the allowed rate of return, there is some presumption that confiscation is taking place. If "perfect hindsight" regulation is undertaken with no compensating ad-

justment in the permitted rate of return, there is confiscation. If the price of the regulated firm's stocks had been moving for some considerable period in a manner that seems in line with the stock prices of fairly comparable enterprises, a sharp drop in the relative price of the securities of the regulated firm in the wake of a substantial change in regulatory policy creates a strong presumption that the regulatory change is confiscatory. In other words, if the securities price is driven out of line with the prices of similar securities of comparable firms, it is the market's verdict that confiscation has occurred.

Ultimately, of course, whether confiscation, in the economic sense, has occurred by virtue of change in regulatory policy is a question to be decided by a court applying the relevant precedent to the facts at hand. Yet, the relevant legal issues are fundamentally economic matters, and ones that economic analysis can illuminate. Indeed, the conclusions on these issues that emerge from economic analysis are entirely consistent with the criteria enunciated by the Supreme Court in 1989 in Duquesne Light Co. v. Barasch. There the Court said that decisions regarding the rates of return for regulated utilities "should be commensurate with returns on investments in other enterprises having corresponding risks" and should not "jeopardize the financial integrity of the companies, either by leaving them insufficient operating capital or by impeding their ability to raise future capital."10 Our economic analysis has described the conditions under which those two requirements, which the Court considered to be implicit in the Takings Clause, are violated.

IV. MITIGATION OF STRANDED COSTS

If recovery of stranded costs is not permitted or is in good part disallowed, there may be deleterious consequences for consumers and preexisting shareholders alike. But even though recovery of stranded costs serves the interests of consumers, those interests clearly are served even more effectively if ways can be found to reduce or eliminate them—in regulatory jargon, to "mitigate" those costs. Many such costs clearly cannot be reduced, as may be true, for example, of contractual obligations undertaken in the past with regulatory encouragement. In other cases there may be

^{9. 488} U.S. 299 (1989).

^{10.} Id. at 312, 314.

some room for mitigation—for example, if alternative and remunerative uses can be found for the stranded investments.

Stranded costs are a loss to society. As in the case of any loss of resources, parties in a position to mitigate the loss should do so. American law is replete with instances in which a party legally entitled to compensation for a harm it has suffered nonetheless is obliged to mitigate that harm if possible.¹¹ Not surprisingly, the concept of mitigation permeates FERC's reasoning on stranded costs as well. As mentioned earlier, in a 1992 ruling FERC allowed a utility to recover stranded costs but required it to mitigate the wholesale customer's stranded investment obligation when the customer leaves the transmitting utility's system. 12 Similarly, FERC's 1994 notice of proposed rulemaking on stranded costs for electric utilities states that the problem of distribution of this loss among departing customers, remaining customers, and shareholders of the utility only arises "[i]f the utility does not have an alternative buyer for the power previously sold to the departing wholesale requirements customer, or some other means of mitigating the stranded costs "13

Though it is clear that the utility's duty to mitigate stranded costs serves the interest of consumers, on closer inspection it is also clear that mitigation serves the utility's best interest as well. This is so because the utility's customers do not have contracts that terminate simultaneously. As customers with early expiration dates depart, they leave the as-yet-unrecovered portion of stranded costs to be borne by a dwindling number of remaining customers. But the overwhelming number of those remaining (commercial and industrial) customers can be presumed to operate in competitive markets for their own goods and services. A firm in a competitive market that is made to pay a higher price than its rivals for an essential input such as energy, particularly for the extended term envisioned in the typical supply contract for electricity, will suffer losses and eventually will cease operations. Companies that cease operations do not buy any electricity, even if they remain contractually obligated to do so.

Knowing that it cannot bankrupt its remaining customers in this manner, the utility has a strong incentive to find new custom-

^{11.} See, e.g., Richard A. Posner, Economic Analysis of Law 118-19 (4th ed. 1992) (describing the obligation to mitigate contract damages).

^{12.} Entergy Servs., Inc., 59 Fed. Energy Reg. Comm'n Rep. (CCH) ¶ 61,369 (1992).

^{13.} Stranded Costs NOPR, supra note 1, at 35,277.

ers for its excess capacity. The obligation illustrates that the interests of the utility and consumers are indeed often entirely compatible, despite appearances to the contrary.

IV. CONCLUSION

Regulators and courts dealing with stranded costs generally are obligated to promote the interests of consumers in adequate and reliable service at a reasonable cost, but with due regard for the legitimate concerns of investors. As the analysis shows, the form of imprudence to be feared most of all is the sort of regulatory act that offers consumers some highly transitory, short-term benefits for which they later will have to pay very dearly. Failure to permit recovery of stranded costs is undoubtedly such a questionable gift.

The crucial issue for execution of a policy permitting stranded cost recovery is the means by which it should be done. Various devices have been suggested for this purpose, including an "access charge" to be imposed on every electricity customer, an "entrance fee" to be paid by every current generation competitor of the utility and every entrant, and an "exit fee" to be paid by any customer that stops purchasing its electricity from the utility. In addition, there have been suggestions proposing fuel charges, subsidies from the public sector to the utilities, and the like. Most of these give rise to difficult issues such as the determination of magnitudes for the charges that do not impede efficiency and are neutral competitively.

Another approach entails inclusion of a stranded-cost-recovery component in the price that the utility charges its rivals for transmission of their electricity. As we show in our forthcoming book, a transmission price of this sort can be carried out in a manner that is compatible with economic efficiency and is clearly neutral in its effects upon all competitors in electricity generation. A correctly constructed regime of transmission pricing therefore may provide a viable method for achieving the efficiency and equity goals that justify the recovery of stranded costs.