expected revenues from the departing customer and the market value of the capacity and energy freed up by that departure. The assumed revenue lost is calculated as the average sales to the customer for the three prior years before the departure. The market value of the freed up energy and capacity is determined by the utility, though the departing customer may replace that value by the market price it struck with the competing supplier, if it chooses to. The departing customer also has the right, under some circumstances, of marketing or brokering the released power resulting from its departure, if it believes the utility's market value estimate is too low.

FERC's method does not include true-ups or reconciliations, as it believes the certainty of determining a fixed stranded cost value outweighs the increased accuracy associated with true-ups.

The legislation recently passed in Illinois also provided for a "revenue lost" method of calculating allowable stranded cost recovery, but refrains from estimating the level of stranded costs; using instead a mandated mitigation of stranded costs.

## D. True-ups

"True-ups" (also known as "reconciliations") are simply a one-time only or periodic revisiting of an initial stranded cost calculation. Based on later or more relevant information, true-ups allow stranded cost estimates to be corrected so that there is less chance of the utility over- or under-collecting, and conversely of the customer under- or over-paying. Stated in these terms, use of true-up would seem to be non objectionable, or even essential, to the stranded cost process. However, use of true-ups in actuality brings up a number of policy questions for decision-makers to consider.

The first thing to keep in mind is that true-ups are rarely used in current regulation in Missouri. When a Commission sets rates for a utility, the rates are based on a representative level of revenues, expenses and rate base for that utility. If these levels are not representative of the actual revenues, expenses and rate base in the period new rates are in effect, then the rate levels will be "incorrect" and the utility will either overearn or underearn. The utility shareholders are fully responsible for the over- or underearning, and either enjoy the incremental income or suffer a deficit until new rates levels can be set in response to the changed revenue, expense, and rate base levels. There is no true-up mechanism employed in normal regulation to make utilities whole for past underearnings, or to reimburse customers when utilities overearn.

The fact that utilities are at risk for earning a reasonable rate of return as set by commissions is what requires their authorized rate of return to be considerably above the return associated with risk-free treasury bonds, for example. Also, the fact that utilities are "at risk" for revenue reductions, expense increases, or increases to rate base is the biggest incentive utilities currently have to maintain or increase their productivity and efficiency over time. Therefore, use of true-ups to reconcile stranded cost recovery by utilities would be a significant departure from normal ratemaking practices.

Further, it should also be recognized that true-up procedures can be used for vastly different purposes. For instance, true-ups can either be a "mid-course correction" or be used as a "make whole" provision. Using true-ups as a mid-course correction means recalculating the stranded cost value for a utility, and allowing that utility to increase or decrease its charge prospectively to reflect the new result. But, the utility would not be allowed to recoup past undercollections or give back past overcollections based on the

new, corrected stranded cost amount. In contrast, use of true-ups as make whole provisions means not only using the new calculation of stranded costs as the appropriate value for ongoing purposes, but also adjusting the rate to reflect past over- and under-collection of stranded costs. The policy implications of using true-ups in these differing manners is quite significant.

True-ups are more commonly associated with administrative stranded cost quantification methods than with those that are more market-based. This is because direct market valuation approaches (sale, spin-off) reflect an outside entities' perception of the market value of an asset or group of assets, and the outside entity (the purchaser) assumes the risk that their market value estimates will later be found to be incorrect. In contrast, when administrative methods are used, either the utility or its customers, or both, will bear the risk of inaccurate stranded cost estimations. All of the "combination" valuation methods discussed earlier can be subject to true-up if desired. However, particularly for the independent appraisal method, if one accepts their results as a reasonable proxy for market values for the assets in question, there is probably no compelling reason to do a later reconciliation of stranded cost amounts.

Following is a series of arguments for and against use of true-ups for purposes of reconciling stranded cost collections.

1. <u>Arguments for True-ups</u>

The most compelling argument for truing-up stranded cost calculations is the risk of initial inaccuracies in such calculations. As previously discussed, stranded costs as determined by administrative methods are dependent upon assumptions about a wide range of factors. In particular, the market cost of power is one variable where it is doubtful

that there will be upfront agreement by all parties. In situations where public utility commissions have considered administrative calculations of stranded costs from a variety of sources, the result has been a wide range of estimates, generally with pro-stranded cost recovery parties estimating more stranded costs, and anti-stranded cost recovery parties finding less stranded costs. In this context, it seems reasonable to minimize the risk that the Commission or other stranded cost decision-maker will order a stranded cost charge based upon materially incorrect and inaccurate assumptions. The rule of thumb should be: the less confidence one has in the results of the initial stranded cost calculation, the more essential that a true-up mechanism be implemented.

Also, it could be argued that a true-up mechanism designed to ensure a certain level of stranded cost recovery by a utility would minimize the risk of the utility in that respect, perhaps allowing a lower cost of capital to be associated with stranded cost amounts. In other words, the more certain the recovery of a set amount of stranded costs, the less risk is placed on the utility, and the required return can be accordingly reduced.

Notwithstanding the above argument, advocates of true-ups note that these mechanisms can be designed not to guarantee the utility a set amount of stranded cost recovery or a specific return on stranded assets, but rather only to correct major discrepancies between stranded cost estimates and actual amounts incurred.

2. Arguments Against True-ups

Those opposing the use of true-ups in stranded cost proceedings emphasize the following four arguments: (1) there should be no guarantee of stranded cost recovery, (2) lack of incentives to minimize stranded costs, (3) the importance of certainty in the electric market place, and (4) potential anti-competitive impacts.

As has been discussed, utilities under normal ratemaking are not guaranteed profits sufficient to allow a reasonable rate of return to be earned; they are instead given the opportunity to earn a reasonable rate of return. It has been commonly held that, if recovery is to be provided for stranded costs, the utilities should be given only an opportunity to recover these costs, not a guarantee of recovery. True-ups designed to make utilities whole over time for specific stranded cost estimates can be thought of as "guaranteeing" a certain level of recovery. This leads to the anomalous situation where a utility would be given more certainty in recovering the costs of above market assets than of its other assets.

If given guaranteed recovery of specific stranded cost amounts through use of true-ups, a utility is not likely to seriously attempt to reduce or mitigate its stranded costs. Only if a utility faces a certain amount of risk in ultimately recovering stranded costs will it have an incentive to reduce that risk by mitigating its stranded costs.

It has been argued that the financial community and potential electric competitors may value the certainty of knowing what the future stranded cost charges will be, compared to the perceived benefits of potential reduction (or the risk of future increases) in those charges due to use of true-ups.

Finally, there is a perceived danger that, under some circumstances, use of true-ups could allow anti-competitive behavior on the part of incumbent utilities. Specifically, these companies could conceivably reduce their rates to the level necessary to forestall competition within their service territories, and make up the difference between their former rate levels and the new "competitive" level through the vehicle of true-up calculation of

stranded cost charges. Whether, and if so to what extent, this is a real threat or not depends upon how the true-up mechanism is structured.

### 3. Conclusions About True-ups

It is a significant benefit to the entire restructuring process if any stranded cost quantification can be done once and not have to be revisited, thereby eliminating the need for true-ups. However, it would be premature at this time to reject use of any specific methods to quantify stranded costs. Since we view use of true-ups as desirable for correcting possible inaccuracies and miscalculations if administrative or combination methods are used, the following are our recommendations on the use of true-ups to update stranded cost calculations.

While using true-ups only in the "mid-course" correction sense would eliminate most of the concerns regarding reconciliations expressed earlier, there is at least one variable that enters into stranded cost calculations that is so inherently unpredictable that use of true-ups as make-whole provisions must be strongly considered. Specifically, the market price of power is a value likely to be volatile and very difficult to predict to the degree that leaving past stranded cost recovery uncorrected for this item may lead to gross inequities in stranded cost collections compared to actual stranded costs.

Therefore, we recommend that use of periodic true-ups to correct substantial inaccuracies in administratively determined stranded cost amounts be strongly considered, with such true-ups to reflect, at a minimum, retroactive correction of market price estimates. There may be other variables for which retroactive correction would also be appropriate. However, reflection of past over- and under collections associated with any corrected variables should be factored into the new trued-up stranded cost rate for

prospective collection from or reimbursement to customers only; there should be no refunds of past stranded cost overcollections by the utility or special assessments to customers to recoup past undercollections.

## E. Estimates of Stranded Costs for Missouri Utilities

As is clear from the foregoing discussion, a wide variety of techniques can be employed to estimate potential stranded costs. And, in applying any particular methodology, a wide range of assumptions could be employed with respect to each individual parameter.

To illustrate the uncertainty in the estimation of stranded costs for utilities serving customers in Missouri, we have gathered information from recent estimates made by independent parties.[22] (It should be understood that these estimates are made as of a certain date and that an estimate made at a different date may produce a different result.)

The following table shows a wide range of estimates.

[22] In this context, independent means that the estimate was made by an entity other than the utility for whom stranded cost was being estimated.

**Recent Estimates of Stranded Costs**
**($ Millions)**

| Line | Source | Publication Date | Empire District Electric Co. | Kansas City Power & Light Co. | St. Joseph Light & Power Co. | Union Electric Company | UtiliCorp United |
|---|---|---|---|---|---|---|---|
| 1 | Moody's Investors Service* | 12/96 | zero or negative | 303 | N/A | zero or negative | 481 |
| 2 | Resource Data International (RDI)* | 4/97 | (234) | 520 | (53) | 1,121 | (259) |
| 3 | Kansas Retail Wheeling Task Force<br>• McFadden/RDI** | 4/97 | 3 | 534**** | N/A | N/A | 84 |
| 4 | • NRRI*** | 9/97 | N/A | (14) to 155 | N/A | N/A | N/A |

* Total all states
** Kansas operations only
*** Kansas operations and generation units only
**** Total company amount is approximately $1.2 billion
N/A = Not Available

Note:
A positive number means that the book value of generation assets is larger than the market value.

The estimates taken from Moody's and RDI (Lines 1 and 2) are comparable in the sense that they both address the totality of the operations of each utility. That is, they consider operations in all states for multi-state utilities.

As an example of the variation in estimates, Moody's estimates that Union Electric Company (now AmerenUE) would have no (or negative) stranded costs, while the RDI estimate is stranded costs of approximately $1.1 billion. Interestingly, the estimates for UtiliCorp are in the opposite direction. Moody's estimates stranded costs of $481 million, while RDI estimates stranded costs at negative $259 million.

Lines 3 and 4 present available information from the Kansas Retail Wheeling Task Force. The McFadden/RDI study is shown on Line 3, and the NRRI evaluation is shown on Line 4. The data here are not comparable to the data shown on Lines 1 and 2 because the Retail Wheeling Task Force focused only on Kansas operations. Further, the NRRI evaluation looked only at generating plants located in the state of Kansas. With respect to Kansas City Power & Light Company, it did observe that including all KCP&L generating

facilities would make the estimated stranded costs essentially zero. It is also interesting to note that the McFadden/RDI estimate for KCP&L's Kansas operations is approximately the same as the separately reported RDI estimate for stranded costs of KCP&L's operations in both Missouri and Kansas.

This review emphasizes the extreme sensitivity of stranded cost calculations to the selected methodology, the time frame analyzed and the specific assumptions with respect to the key parameters.

## F. Overall Conclusion

To reiterate, it is our belief that avoidance of true-ups would be beneficial to any electric restructuring process. However, we also recognize that use of pure market methods will not be feasible in every foreseeable circumstance. Each market method has its unique risks and advantages. Because the best market mechanisms require structural separation and asset divestiture, these methods are not always easily applied. While divestiture is also a consideration for resolving market power concerns, we do not believe asset divestiture is justified solely on stranded cost quantification considerations. There are also methods of quantifying stranded costs that do not require divestiture, but do use market determined price data, though these mechanisms have various drawbacks and entail certain risks. In our report, we have referred to these as "combination" methods.

We recommend that the Legislature and/or Commission, for purposes of determining stranded cost amounts, operate under a policy that methods of quantifying stranded costs should utilize available market information to the extent possible. "Combination" methods should be seriously considered. If administrative methods are to

be used, market information should be used to support the results of the analysis as much as possible. However, strong consideration should be given to subjecting any stranded cost amounts set through administrative means to periodic true-ups or reconciliations in a manner that does not impair the utility's incentive to mitigate stranded costs amounts or adversely affect the development of a competitive market for the supply of generation at the retail level.

## CHAPTER IV

## Timing of Recovery

This chapter addresses the issue of the time frame during which allowable stranded costs (if any) would be recovered from retail electric consumers in conjunction with a program for retail access. For purposes of illustration only, it is assumed that some amount of stranded cost exists and is to be collected from retail consumers. The illustration is neutral with respect to the proportion of identified stranded cost to be recovered from consumers (i.e., the illustrative examples do not depend upon the percentage of recovery).

A second scenario is presented to address the circumstance where stranded cost is negative.

### A. Positive Stranded Costs

Figure IV-1 shows the typical revenue requirement trajectory for generating resources. The pattern is a reduction over time as generating assets depreciate. (The particular slope of the line also depends upon other factors, including the rate of change in O&M expenses.) The specific slope of the line is not critical to the illustration. The general point is that over time the revenue requirement associated with a particular generating facility is expected to decrease. At the same time, the market price of power

(i.e., the revenue that could be produced by competitively selling output from the generator) is expected to increase.[23]

Two different examples for timing of recovery are addressed. The first involves a two-step recovery process and the second illustration involves a three-step recovery process.

Figure IV-2 assumes that the recovery process starts with a rate freeze for a certain number of years. The rate freeze is designed to allow the utility to charge rates in excess of its then current revenue requirement in order to collect or pay down a portion of the allowable estimated stranded costs. By charging rates in excess of the then current revenue requirement for the existing generating facilities, the utility receives funds that otherwise would not have been collected (because rates presumably could have been reduced) and applies them to reduce existing generating asset balances.

When open access is granted, the rates would decrease and a level of Stranded Cost Charge (SCC) recovery would be set in place. The level of the charge, and its duration, would have to be determined as a function of the estimated remaining amount of stranded cost, the minimum reduction in rates that the Commission wanted consumers to enjoy, and the particular sharing (if any) of stranded cost recovery between consumers and stockholders. An initial estimate of stranded costs would have to be made prior to the date of implementing the selected recovery process. This amount could be fixed, or there

[23] For purposes of illustrating how stranded cost recovery works, it is necessary to focus on the existing array of generating units. It is recognized that over time a utility will experience growth and will undoubtedly add new facilities. Stranded cost does not address the cost of new facilities, however. It addresses the relationship between the traditional revenue requirement for existing facilities and their value in the market. If these new facilities were included, the slope of the revenue requirement line for the combination of existing plus new facilities would be much more gradual than in the illustration.

could be mechanisms in place for adjusting the frozen rate and/or the SCC if new and better information became available.[24]

Figure IV-3 shows, after the open access date, the combination of the SCC charge paid to the utility and the market price of power paid by the customer to its chosen supplier.

Figure IV-4 shows a second example with a three-step process for stranded cost recovery. The first stage is the same as in the first example, but the rate freeze is in place for a shorter period of time. Again, an estimate must be made up-front of the expected level of stranded costs; however subsequent market tests and adjustments can be made as with the prior illustration. The second step is a reduced rate reflecting a lower level of recovery for an interim period. The final step is a lower value of SCC, as compared to the second step, which allows for recovery of the balance of the allowable stranded costs. Under this example, the final level of SCC is probably higher than in the second step of the first example, and probably extends for a longer period of time; all other things equal.

Figure IV-5 shows the combination of the SCC charges and the market price for power paid by the customer during the period that this SCC is being applied.

It should be noted that in the first recovery example there is more time to prepare for open access, and the utility collects a larger proportion of the allowed amount in the early years. However, consumers do not have the opportunity to purchase competitively as early, and they pay higher rates at the beginning of the period. The second example

[24] See the discussion in Chapter III with respect to various methods for estimating stranded costs.

extends the period over which stranded cost recovery occurs, but provides consumers the opportunity to achieve savings earlier in the process.

## B. Negative Stranded Costs

For purposes of illustrating negative stranded costs, the market price line is the same as in the illustration of positive stranded costs, but the revenue requirement line in this scenario begins at a lower value to recognize a lower embedded cost for the utility whose existing revenue requirement is closer to the market price of power (see Figure IV-6). Figure IV-7 shows the SCC, which is a negative value to reflect credits to consumers for the amortization of negative stranded costs. Figure IV-8 shows the combination of the negative SCC and the market price of power which the customer would be paying.

# ILLUSTRATION OF TIMING OF STRANDED COST RECOVERY

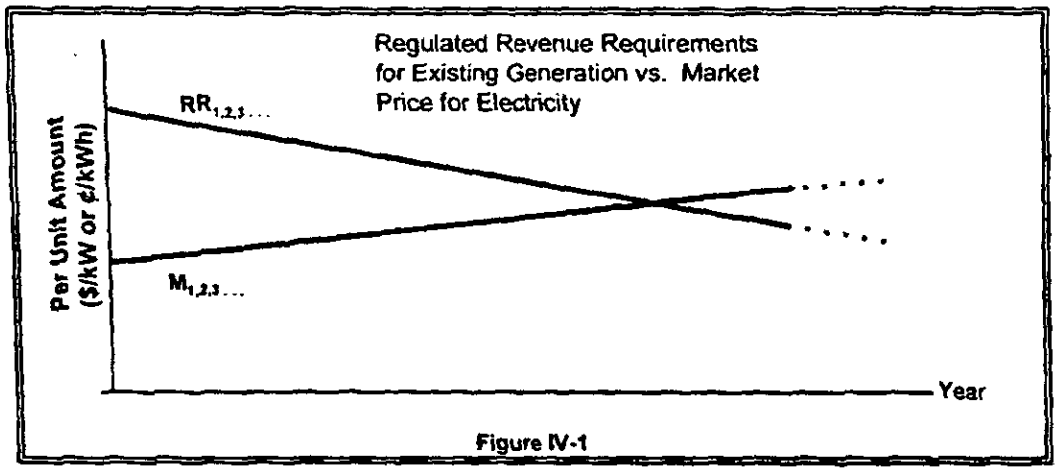


Figure IV-1

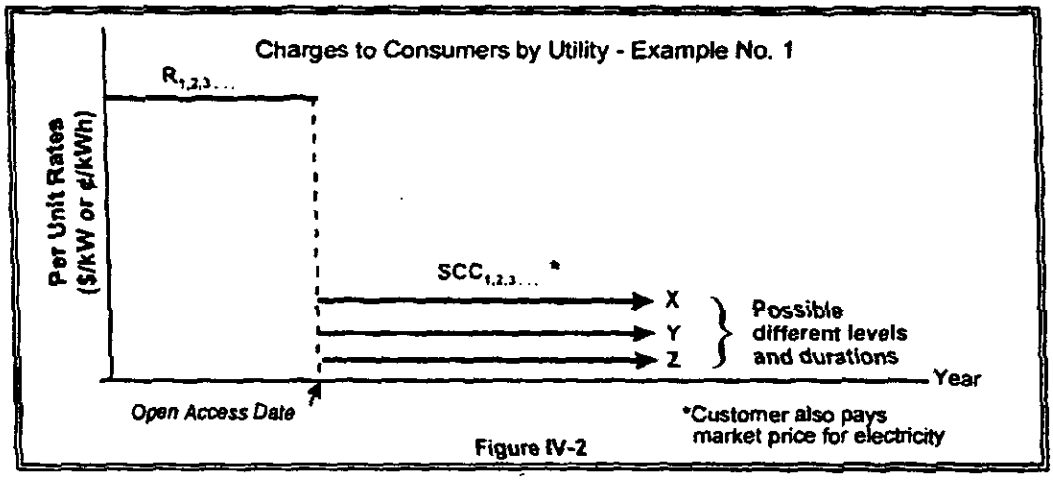


Figure IV-2

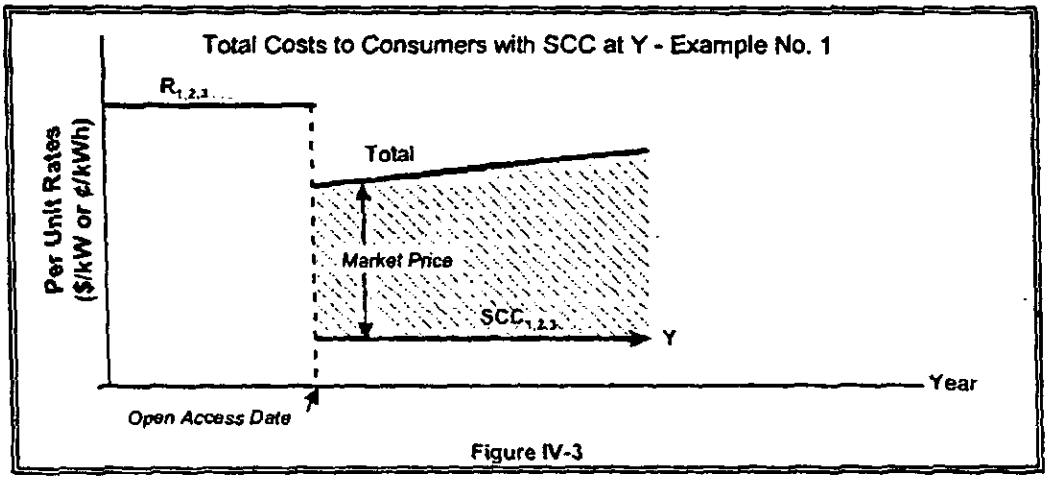


Figure IV-3

RR = Revenue Requirement for Generation
*M* = Market Value of Generation
SCC = Stranded Cost Charge
R = Rate Charged (to cover current generation costs plus some recovery of above market costs)

Subscripts $_{1, 2, 3...}$ refer to the amounts for each customer class

# ILLUSTRATION OF TIMING OF STRANDED COST RECOVERY

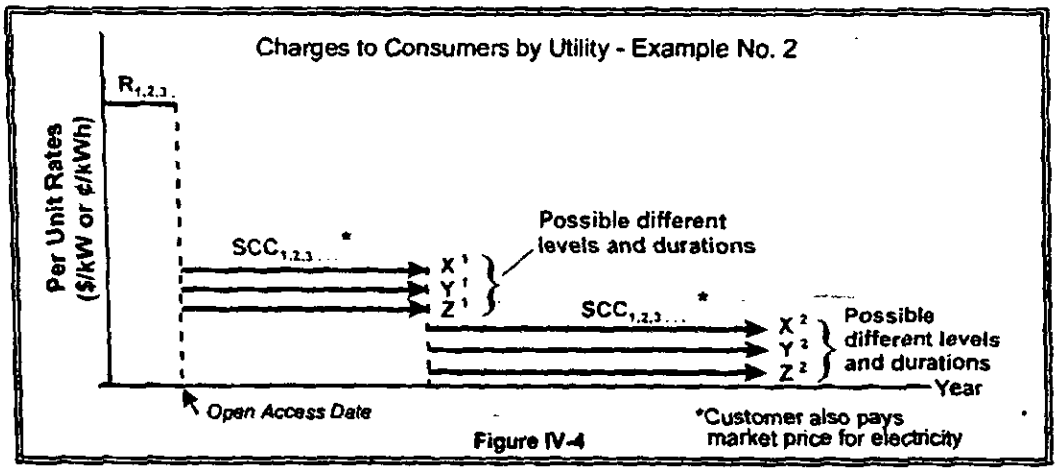


Figure IV-4

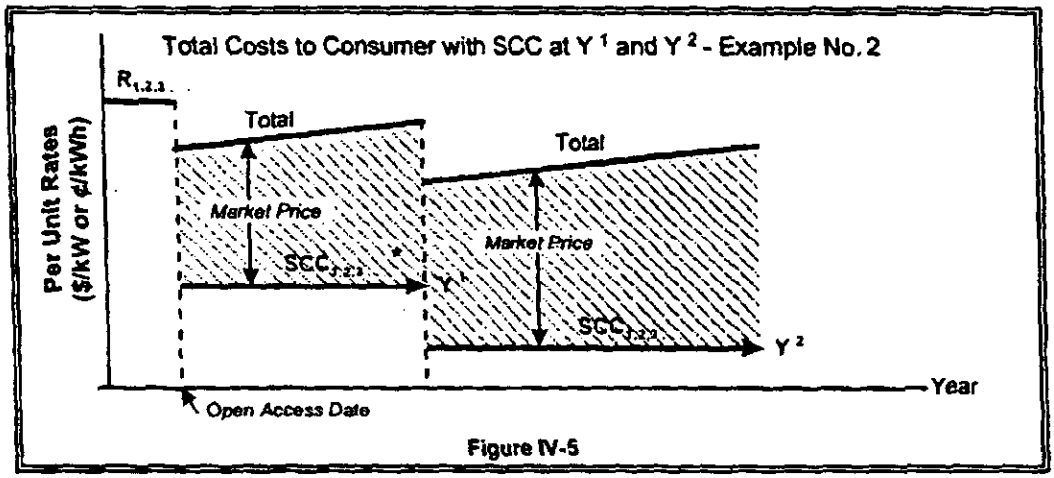


Figure IV-5

RR = Revenue Requirement
M = Market Value
CTC = Competitive Transition Charge
R = Rate Charged (to cover current costs plus some recovery of excess costs)

Subscripts $_{1, 2, 3 \ldots}$ refer to the amounts for each customer class

## CHAPTER V

## Mitigation of Potential Stranded Costs

### A. Introduction

"Mitigation" of stranded costs essentially means a reduction in the amount of potential stranded costs. The term implies active efforts by utilities to minimize the amount of potential stranded costs they may face once retail competition is introduced. The perceived need for mitigation is based on these assumptions: (1) that since stranded cost recovery will have some detrimental impact upon the workings of a free and unfettered competitive market for electricity, it is best to minimize the impacts of stranded costs on the new electricity market; and (2) minimizing or eliminating stranded costs will result in potentially lower bills sooner for customers. Mitigation of stranded costs can occur prior to the start of retail access, or during the remaining lives of the generating assets giving rise to stranded costs after retail competition is initiated, or both.

Mitigation is a broad term, and is not necessarily used in the same sense in all stranded cost contexts. In particular, mitigation can be defined differently from the customers' perspective and the utility's perspective. Mitigation from the customers' perspective means that the utility (and its regulators) takes all possible steps to reduce its need for potential stranded cost recovery, so that customers are the last possible source of recovery of these costs. Mitigation from the utility's perspective means that its stranded cost total is minimized at the time competition is introduced. Since one way of mitigating stranded costs under this definition is collecting additional amounts from customers in rates to recover potentially stranded costs prior to the initiation of competition, this

definition does not necessarily imply that customer payments for stranded costs are minimized. We will discuss both types of mitigation in this report.

If stranded costs are thought of as primarily consisting of past, sunk capital costs incurred by utilities that will not be recoverable in a competitive electric market, it should be noted that direct mitigation of such costs is not generally possible. It is generally not possible to "reduce" an expenditure that has already been made. Therefore, the term mitigation usually signifies a cost reduction or revenue enhancement that can be offset against stranded cost amounts, not necessarily a direct reduction in sunk capital costs. It should also be noted that use of successful mitigation efforts to reduce rates will not mitigate stranded costs. Without expressing any opinion on whether the electric restructuring process should include provisions for rate reductions for some or all customers, it is true that revenue enhancements and expense reductions will have no impact on stranded cost amounts unless the utility is allowed to retain the savings for at least a period of time.

The perceived importance of stranded cost mitigation policy can be measured by the fact that most regulatory agencies that have to date made decisions regarding stranded cost recovery have specified that only recovery of stranded costs net of mitigation will be allowed. Affirmative actions by utilities to reduce their potential stranded cost exposure are expected before responsibility for stranded cost recovery is passed on to ratepayers. For example, the Connecticut Commission noted that utilities' obligation to mitigate stranded costs is similar to the obligation to mitigate damages. For example, utilities must make reasonable efforts to reduce stranded cost losses; could not passively

allow the losses to accumulate; and could not incur further expenditures when they could be avoided.[25]

The remainder of this section will describe the various mitigation techniques and strategies that may be available to utilities and regulators to reduce future stranded cost exposure. By discussing these techniques, it is not our intention to endorse or encourage use of any particular technique or strategy. We will also set forth the Working Group's overall conclusions on this issue at this time.

## B. Types of Mitigation

Mitigation techniques can generally be separated into the following categories: (1) cost reductions; (2) revenue enhancements, (3) cost shifting, and (4) indirect mitigation. Each of these categories will be described in turn.

### 1. Cost Reductions

This category reflects measures utilities can take to bring the embedded cost of generation (including operating costs) and purchased power contract prices closer to the market price of power.

These measures might include:

a) Generation expense savings from plant heat rate reductions, generation operations and maintenance expense reductions, and savings from the retirement of uneconomical generating units;

b) Generation-related savings in reduced overhead expense, such as decreases in general plant and A&G expenses;

[25] CPUC Order in Docket No. 94-12, Page 101. The Commission findings on restructuring did not go into effect as enabling legislation was not passed.

c) Refinancing of debt and/or buyback of equity (this item does not encompass "securitization" of stranded costs, which is discussed separately in this report);

d) Divestiture of generating assets. While divestiture will not always result in a higher market value determination than an administrative approach, divestiture can be thought of as a mitigation technique to the extent there are willing buyers who expect to be able to operate the asset and/or to market power more effectively than the current owner. Under administrative approaches, it may be difficult to identify this extra value;

e) Renegotiation or buy-out of above market purchased power contracts; and

f) Minimization of new capital investments.

**2. Revenue Enhancement**

This mitigation category involves efforts by utilities to increase their revenue levels, generally by taking advantage of new opportunities presented by a deregulated, competitive electric industry. These efforts might include:

a) Marketing of excess capacity or energy. Even power that is uneconomic in a competitive market will have some value on the market. It would be appropriate for utilities that have freed-up capacity due to the loss of customers to competitive forces to still market the freed-up power and maximize their return on it;

b) Auctioning of excess capacity or energy;

c) Marketing strategies to improve system load factors;

d) Sale of ancillary services;

e) Sale of excess emission allowances;

f) Business opportunities associated with nongeneration assets and resources with a market value greater than book value.

This category also includes potential competitive leveraging of transmission and distribution assets (e.g., T&D rights-of-way, dark fiber, customer billing system hardware and software, power marketing assets, and metering systems with the capacity to offer

competitive services). It may also include the intangible assets and resources that can enhance both power marketing and retail merchant function profitability, such as in-house expertise in all aspects of the electric business, customer loyalty and brand name recognition, and customer billing and credit information. To the extent this category reflects revenues and expenses associated with nonregulated activities, some parties would be strongly opposed to inclusion of this item as an acceptable mitigation approach. Also, if this type of mitigation is judged to be appropriate, it could be argued that "lost enterprise value" to utilities as a result of restructuring (which might include such impacts as foregone economies resulting from disaggregation) should be reflected as an offset to this item as well.

**3. Cost Shifting**

This category does not necessarily represent true mitigation strategies, as it does not result in revenue increases or expense decreases. Rather, these measures result in a shifting of cost responsibility between utility customers and shareholders, or between classes of ratepayers, or an acceleration of cost recovery from customers, all designed to reduce overall stranded cost totals. Depending on a utility's earnings level at the time, use of the these options will have different impacts on whether, and if so how much, costs are actually shifted to customers or shareholders by these strategies. Among the ideas frequently discussed within this category are:

a) Acceleration of depreciation of generation assets to increase recovery of fixed costs while the retail franchise is still intact;

b) Voluntary write-offs of above market generating plant costs; and

c) Changes in the timing, pace and extent of restructuring.

These factors can influence the relative amount of stranded costs. For example, delaying retail access by several years should have the impact of reducing a utility's stranded costs, as the book value of its assets will decrease over time. However, this potential reduction in stranded costs is a consequence of denying customers the receipt of potential benefits from competition for the period of the delay.

**4. Indirect Mitigation**

Indirect mitigation techniques refer to regulatory structures or practices that, while not contributing directly to an increase in revenues or a decrease in expense for the utility, may intentionally or as a side effect support an environment that encourages and provides incentives to utilities to mitigate their potential stranded costs. These practices might include:

a) Rate freezes. An inability to raise rates may put significant pressure on a utility to mitigate stranded costs, particularly if there is a limited time period prescribed for the recovery of stranded costs. (However, mitigation concerns are generally not the primary expressed reason for adoption of rate caps or rate freezes);

b) Mandatory rate reductions for some customer classes. This approach, adopted in some jurisdictions to ensure that residential and small commercial customers receive lower bills sooner, will as a side effect put pressure on utilities to mitigate stranded costs;

c) Incentive regulation. Also known as alternative regulation or performance-based regulation, this approach generally allows utilities to retain a portion of overearnings as an incentive for greater efficiency (while giving a portion of the overearnings back to customers in the form of rate reductions or rate credits), as opposed to reducing rates in total to what otherwise would be considered a reasonable return on equity. This concept can be applied to stranded cost recovery by using all or part of the utility's share of over-earnings to write down potential or actual stranded costs. By making some portion of a utility's stranded cost recoverable through an incentive regulation plan, the company would have a powerful incentive to maximize its earnings so as to earn the returns necessary to write down its stranded costs.

d) Shared savings. Some jurisdictions (Rhode Island, for one) have allowed utilities to retain a portion of any savings associated with a renegotiation or buy-out of uneconomic long-term contracts, as an incentive for the utilities to mitigate stranded costs in that manner. In the same fashion, New York has also provided utilities an opportunity to retain a portion of the proceeds associated with auctions of generating assets, instead of devoting all the gain to offsetting stranded costs.

## C. Conclusions

We believe that effective efforts to mitigate stranded costs are essential to providing ratepayers an opportunity to experience a reasonable level of benefits from the introduction of competition. Any allowance for stranded cost recovery should be balanced by a requirement that utilities receiving such recovery mitigate their stranded costs to the maximum extent possible. To that end, we offer the following recommendations.

First, in any proceedings in which stranded cost recovery claims are made by utilities, those parties requesting stranded cost recovery should, along with their stranded cost estimates, present estimates of the expected mitigation of those costs as well. The Commission should have authority to consider whether such mitigation efforts are reasonable and sufficient in determining the amount of stranded cost recovery to authorize. One possible approach would be to allow the Commission to take into account the reasonableness of a utility's mitigation efforts in determining what return, if any, should be allowed on stranded investment. Absent exceptional circumstances, a utility should not receive stranded cost recovery based solely on estimates of stranded costs derived from current financial data, with no evidence as to potential and actual mitigation efforts.

Second, the use of incentives to encourage active mitigation efforts by utilities should be considered. Although there is no present indication that long-term purchased

power contracts will be a major source of potential stranded costs in Missouri, the idea of allowing utilities to retain a small portion of the renegotiation/buy-out savings associated with above market contracts is attractive in concept. If divestiture is thought to be an attractive approach to mitigation of stranded costs (or for other purposes), then incentives for divestiture similar to those offered in New York might be considered. More generally, the concept of using incentive plans or performance-based plans as a tool in allowing stranded cost recovery should be explored. In practice, this would mean the utilities would be at risk from recovering a portion of their stranded costs through the utility's share of earnings above authorized levels. This would put the burden of recovery of that portion of stranded costs on the utility's shoulders, requiring it to achieve earnings levels sufficient to allow the opportunity for full stranded cost recovery.

Third, we do not believe it should be the role of the legislature or regulators to be overly prescriptive in detailing how utilities should mitigate stranded costs. A better approach would be to establish overall ground rules for restructuring that provide adequate incentives for mitigation by utilities. Such approaches would allow the utilities to determine for themselves what would be the best approaches to mitigating stranded costs, and thus appropriately leave the financial and operating decisions necessary to adequately mitigate stranded costs to utility management.

Finally, the question may arise as to what extent utilities should be able to take steps to mitigate stranded costs prior to the introduction of competition, particularly when those steps may have immediate rate impacts on customers. As a general rule, we do not believe rates should be increased to allow for "mitigation" of stranded costs, since customers as of yet do not have any way of benefitting from the introduction of competition,

and should not be expected to pay for competition in advance. With that caveat, however, we do believe the Commission should have the authority to consider, in advance of competition, mitigation strategies for utilities that do not require rate increases. Along this line, we recommend that utilities be given greater freedom to accelerate recovery on their books of generating assets than current regulatory rules allow, if such increases do not have any rate impact. However, this policy interest should continue to be balanced by the ongoing objective that ratepayers receiving monopoly service pay rates that do not exceed a "just and reasonable" level. Also, this general recommendation should not be interpreted as advocating any action that would violate the spirit of existing agreements concerning incentive/sharing plans that are already in place, unless all of the parties to the agreement concur with any proposed revisions.

## CHAPTER VI

## Role of Securitization

### A. Introduction

Securitization is a financing technique that can be applied to stranded cost collections, which has the potential to mitigate the amount of stranded cost recovery to some degree. Statutes allowing use of securitization in electric restructuring efforts have been passed in California, Illinois, Massachusetts, Pennsylvania, Rhode Island, and other states. However, not all jurisdictions have accepted the use of securitization, and it remains controversial for several reasons that will be explored further in this chapter.

As a potential mitigation technique, the issues raised by securitization are unique enough that the Working Group believes this subject deserves extended discussion in the Report beyond that given to other mitigation strategies in Chapter V.

### B. How Securitization Works

Under a securitization procedure, the state legislature or state regulatory commission irrevocably orders that consumers pay a separate charge as part of their overall electric bills to allow a utility to recover an identified portion of its stranded costs. The utility billing the stranded cost amounts pledges to pay to a trust (or other special purpose entity) the stranded cost amounts expected to be received from customers. The trust then sells bonds to security investors, promising to use the stranded cost proceeds received from the utility to repay the bonds and pay interest on them. In turn, the trust provides the bond proceeds to the utility, giving it upfront recovery of the portion of stranded costs that were securitized. From that point, the utility continues to collect the

stranded cost amounts from current customers (and former customers choosing new suppliers) in its previous service territory. The utility then turns the proceeds over to the trust, which uses the proceeds to repay principal and interest on the bonds.

In most states, legislation is required to allow securitization of stranded cost transactions to go forward. This is because legislative action is normally required to define the future stream of stranded cost recovery revenues as an intangible property right that can be sold by the utility. Also, the benefits of securitization are heavily dependent upon favorable tax treatment of the transaction from the utility's perspective. Specifically, the utility will want to avoid incurring a tax liability associated with the upfront lump sum payment from the trust, and to defer recognition of revenue from the stranded cost payment stream until it actually receives payments from customers. So far, IRS rulings have been supportive of utility use of securitization in these respects.

Finally, securitization is not unique to the electric industry. Securitization transactions are carried out routinely for such items as credit card payments and mortgage payments. Nor is there any conceptual reason why utilities could not use securitization in other aspects of their business besides stranded costs, including transmission and distribution operations, assuming supporting state legislation and tax treatment that would allow funds to be raised in this manner at a lower cost of capital.

## C. Securitization Proponents View of Benefits

The major perceived benefits of securitization claimed by advocates of this procedure are as follows:

1. The utility is able to lower its cost of capital. This is because the securitization bonds will pay a lower interest rate commensurate with

a high grade instrument, as opposed to the higher cost associated with the utility's existing cost of capital.

2. Customers benefit to the extent that the utility's lower cost is shared with customers through lower rates and/or a reduction in stranded costs.

3. Those interested in holding bonds benefit in that the securitization bonds represent a high grade investment opportunity.

## D. Securitization Critics View of Detriments

The major criticisms of securitization that are commonly heard are:

1. Securitization results in an inappropriate shifting of risk, and

2. Securitization encourages the potential for anticompetitive conduct.

Opponents of securitization assert that the reduction in the required return on stranded assets resulting from securitization flows from the fact that securitization lowers risks for bondholders by shifting repayment risk to utility customers. The lower the risk to investors, the lower the cost of capital demanded. Keeping in mind the earlier discussion of stranded cost estimation techniques, it is clear that these estimates may be subject to considerable forecasting error. But if securitization is premised upon an irrevocable right of the utility to recover a certain amount of stranded costs in rates, which in turn will be passed along to the securitization trust, then any forecast error in the original stranded cost estimates by definition cannot be corrected. The risk that stranded cost estimates may be incorrect will be shifted from the utility to its customers by use of securitization.

This point is illustrated by the nature of the true-up mechanism that is usually part of the securitization procedure. A securitization true-up is wholly different in concept from the types of true-ups previously discussed in Chapter III. A securitization true-up will not

correct for errors made in forecasting the market price of power and other variables, for example; it is only intended to make sure that actual stranded cost collections from customers equal the amount of stranded cost recovery the securitization bonds are based on. Given that inaccurate forecasts of stranded costs will not be corrected under securitization, use of this technique does not guarantee that customers will not overpay stranded costs relative to the amount actually incurred by the utilities. The inability to perform true-ups for securitized stranded costs in the manner suggested in Chapter III is a less serious concern if stranded costs are quantified using market methods rather than administrative methods. It is partly due to true-up concerns that some jurisdictions that have allowed securitization restrict its use to some percentage of total estimated stranded costs.

There is also a concern that securitization will foster or encourage an anti-competitive environment in the developing electric market. As previously explained, securitization may allow utilities complete recovery of stranded costs upfront. The utilities will have some of their generating assets completely paid off at the onset of competition, plus enhanced cash flow from the securitization proceeds. This would leave the utilities in a better position than they would be if they had remained under traditional regulation, and will also leave them in a better position than potential unregulated competitors in the generation market. Fears have been expressed that utilities with paid-off assets and a "war chest" of cash will be able to price generation aggressively to drive potential competitors out of the business, and/or use their securitization cash to acquire potential competitors and forestall competition.

The remedy most often suggested by those concerned about securitization's impact on the competitive market is to require utilities to utilize securitization proceeds to write down the capitalization on their books related to the stranded assets. Some jurisdictions have adopted this proposal. Other critics assert, however, that this is not a genuine solution since the utility's total debt capacity remains unchanged and the retirement of generation-related debt will make room for the issuance of new debt that can be used for competitive ventures. Some commenters also suggest that availability of securitization should be restricted to utilities that divest generating units, so the proceeds are not allowed to distort the generating market in any manner.

## E. Securitization Proponents Response to Criticisms

Proponents of securitization claim that the risk shifting argument opposing securitization is really based solely on a concern that the amount of stranded cost recovery that the securitization bonds are based on might exceed the actual stranded cost incurred. This risk can be effectively eliminated by limiting the amount of stranded cost recovery that can be securitized. However, as mentioned, the value of securitization to both the utility and the customer is that it provides up front cash at a lower cost of capital. Thus, any limitations on the amount of stranded cost recovery that can be securitized limit the extent to which utilities and customers can enjoy the benefits of securitization.

The "anticompetitive" concern is based upon what proponents believe to be a fundamental misunderstanding or misrepresentation of the facts. Securitization does not leave utilities with paid-off assets and a "war chest" of cash. First, stranded cost is by definition what the utility cannot recover in a competitive market. The assets are not "paid-

off," only the nonrecoverable portion of assets are stranded costs. The point of stranded cost recovery is to put utilities on the same footing as competitors so that future competition is based on going forward costs, not costs that utilities incurred under the regulatory regime. Securitization is a tool that can be used in stranded cost recovery. The concern over "paid-off" assets is an attempt to reintroduce objections to stranded cost quantification and the amount of recovery. Second, securitization does not create a "war chest" of cash. What it does is allow the utility to borrow against the proceeds of the amount of stranded cost recovery that is allowed to be securitized at a lower cost of debt than the utility's existing debt. A utility can always seek to borrow funds to obtain up front cash, but the cost of raising that cash will be higher absent securitization. Here again, the point of using securitization is to put utilities on the same footing as unregulated competitors.

The write-down or divestiture remedies reflect the concerns of those with objections to the quantification of stranded costs and the amount of stranded cost recovery that should be allowed, rather than concerns with securitization as a tool for use in stranded cost recovery.

## F. Conclusions

The concept of securitizing stranded costs is far from a cure-all in addressing stranded cost recovery issues. We accordingly recommend that policy makers approach the concept of securitization carefully. Under certain circumstances, securitization may be helpful in mitigating stranded costs. Accordingly, options for its possible use should be preserved, keeping in mind the previously expressed concerns.

# CHAPTER VII

## Pros and Cons of Stranded Cost Recovery

### A. Introduction

This chapter of the report provides some of the more prominent arguments noted in the literature discussing stranded costs, from both sides of the controversy: those arguing for full stranded cost recovery and those advocating no, or limited, recovery. The presentation of these points herein is intended to be neutral and unbiased toward either position.

### B. Reasons for Allowing Stranded Cost Recovery

Certainly the most common rationale offered for stranded cost recovery is the need to adhere to the "regulatory compact." The "regulatory compact" refers to an unwritten set of alleged mutual obligations between utilities and government authorities/regulators that have governed the operations of the electric utility industry in this country through most of this century. While regulatory compact arguments, pro and con, often have legal implications that may to some degree overlap with the arguments discussed herein, it is not our intent to address legal points in this document. Any legal issues concerning the stranded cost recovery that need to be brought to the Task Force's attention will, we assume, be addressed by the Task Force's Legal Committee.

The regulatory compact is most often characterized as granting a utility an exclusive franchise to serve customers in a particular service territory, in return for obligating that utility to serve all customers who desire, and pay for, service within that area. Further, the government/regulators promise to provide the utility an opportunity to earn a reasonable

return on the investment necessary to provide its customers with safe and adequate service. While the utility will be constrained from earning excessive rates of return on its investment, it also should not take a loss or earn an inadequate return on capital it has invested in a prudent manner to serve its customers.

In relation to potential stranded costs, proponents of recovery assert there are in particular two key points to be made from the above discussion. First, that the obligation to provide service to customers, and to make the necessary investments to do so, was not discretionary to the utility but was required of it. The resource decisions made by utilities to fulfill the obligation to serve were not to be judged in hindsight under the current regulatory regime as to whether they were the most economical course of action to take, but rather would be assessed by regulators under a "prudence" standard, that is, did the utility make the right decisions based upon the facts and circumstances known to it at the time the decisions were made. Accordingly, the argument follows that it would be inequitable and unjust not to allow shareholders full recovery of investments that utilities were obligated to make to serve their customer base. Also, since all investments currently reflected in customer rates have presumably been determined to be prudently incurred by regulators, it would not be appropriate to retroactively disallow recovery of prudent investment by a change in the method of regulation.

The second point frequently made by parties relying on the regulatory compact theory to justify recovery of stranded costs is the fact that utilities have been restricted from earning high rates of return on their investment under the regulatory methods used currently and in the past. Any excess profits or large gains would not be allowed to be retained on an ongoing basis by the utility, but would be passed back to customers in the

form of rate reductions. Symmetry would then require that any losses to utilities from the introduction of competitive forces in the electric industry should not be passed on to shareholders, under the rationale that if utilities historically have not been allowed to retain large gains, neither should they be required to incur large losses.

In its basic form, arguments for stranded cost recovery based on the regulatory compact amount to a claim that it is unfair for utilities and their shareholders to incur a loss associated with a change in the regulatory rules implemented in the middle of the game. Notwithstanding any legal claims that may be made, it is an equity argument: "we played by the rules set in the past, therefore it is unfair for us to now incur losses on investments made pursuant to the utility obligation to serve that were determined to be prudently made at the time."

Some jurisdictions that have approved stranded cost recovery in some form, but have nonetheless rejected legal claims mandating stranded cost recovery (Maine, Massachusetts), have recognized "equity" arguments made by utilities in regard to the regulatory compact, and have in part based their decision to allow recovery based on what they perceive to be the importance of government bodies "living up to their past commitments." They assert failure by the government to allow recovery of past prudent investments would undermine the faith of the financial community in future electric markets and regulatory structures, as investors would not be sure that the government would not again later change the rules and put their investments at risk.

Not all arguments for stranded cost recovery are directly based upon the regulatory compact concept. For example, failure to recover stranded costs is sometimes alleged to endanger the financial viability and integrity of (at least) some utilities. The resulting

financial disruption could endanger the provision of safe and adequate service by the utilities. Loss of jobs would be one likely result. In extreme cases, utility bankruptcies may occur.

Also, the risk of asset stranding is argued to have never been incorporated into the authorized returns on equity granted to electric utilities by regulators. Therefore, the risk of a fundamental change in regulation is an uncompensated risk, necessitating stranded cost recovery. In the area of rate of return, it is also alleged that stranded cost disallowances will raise the utilities' cost of capital on a prospective basis, making it difficult for the utility to raise capital and provide service to customers at competitive rates.

Proponents of stranded cost recovery also argue that government in general and regulators in particular have mandated, approved or encouraged utilities to make some of the investments that may become stranded in the competitive environment. Power purchases from "qualifying facilities" at administratively set "avoided cost" rates in accordance with the PURPA Act of 1978 and demand-side planning initiatives are two examples of "mandated" expenditures that are frequently mentioned as potential stranded costs. It is also alleged that the federal government for many years actively encouraged utilities to construct nuclear generating units as part of the overall energy policy in effect at the time. Stranded cost proponents also note that regulators generally had the power to approve or disapprove generating resource decisions made by utilities. Finally, the creation of "regulatory assets" by regulators (which are also subject to stranding) and the setting of purportedly inadequate depreciation rates for utilities are argued to have resulted from, in part, a desire by regulators to delay recovery of utility costs to later generations of customers, exacerbating potential stranding problems.

In response to the argument that stranded cost recovery may be anticompetitive, proponents of recovery have argued that, to the contrary, stranded cost recovery is necessary for true competition to evolve. The argument is that, under principles of efficient competition, utilities should compete on the basis of short-run marginal costs (i.e., the cost to provide the next unit of service.) The amount of "sunk" cost a utility might have on its books is argued to be irrelevant to its ability to compete on a marginal cost basis. The concern is that a competitor that has higher marginal costs than the incumbent utility may still nonetheless be able to provide a cheaper rate to the customer because it did not have to incur the sunk costs that the incumbent has incurred. By allowing the utility to collect stranded costs through a charge regardless of whether it continues to serve a particular customer or not, the utility's sunk cost disadvantage is eliminated, and it is free to compete on the basis of its marginal costs. In the absence of stranded cost recovery, to allow the firm with higher marginal costs to provide service to the customer is held to be against the principles of economic efficiency, and might lead to the premature retirement of low marginal cost facilities by incumbent utilities, and the building of relatively high marginal cost generating units by competitors.

Another argument for stranded cost recovery within the realm of economic theory is that any savings to customers from disallowance of stranded costs are not true "savings" in the economic sense, but are merely transfers of wealth from utility shareholders to utility customers and/or electric competitors. In other words, there is no true societal benefit resulting from failure to charge customers for utility stranded costs.

Finally, it is often argued that stranded cost recovery as a policy is a necessary condition for the electric utilities to cooperate in the transition to a new, competitive

industry structure. Otherwise, the restructuring process could be tied up for years in the court system, with customers effectively denied the potential benefits of competition.

## C. Reasons for Not Allowing Full Stranded Cost Recovery

The regulatory compact, or lack of one, also is a predominant theme in the positions advocating no or limited recovery of stranded costs. The contention is that the regulatory compact, as such, does not exist. It is argued that there was never a formal "compact" or contract agreed to, delineating the responsibilities and obligations of all the involved parties. The regulatory compact under that theory would be an after-the-fact construction conveniently put forth to support utility claims of injury from the onset of competition. Some have stated that this belief is supported by research that shows that there does not appear to be any use of the term "regulatory compact" prior to the early 1980s, when it was first alleged by utilities that the compact was breached in the context of the nuclear cases of that time period.

Even if the regulatory compact exists, and even if the common characterization of it is a fair description of the mutual obligations of the utility and its regulators, opponents of full stranded cost recovery question why the past existence of the compact should be held to now protect the utilities against the impact of competition. It is noted that the obligation to serve customers, in and of itself, would not lead to the incurrence of above-market costs. Above-market costs would be more associated with the specific resource decisions made by utility managers. Further, it is argued that utility customers were never part of any compact except to the extent they were "locked" into it, never had an affirmative

obligation to buy from the utility, and therefore should have the right to "opt out" of the compact if more economic electric service alternatives become available to them.

Most of the response to stranded cost recovery arguments that relate to the regulatory compact revolves around the basic concept that the move to competition is premised all or in part on a belief that the present regulatory system has failed to provide electricity to customers at rates that reflect reasonable cost levels and efficiency. In that event, if a regulatory compact exists, it has not worked well from the perspective of the customer. The argument follows that the utility shareholder then should not be held harmless relative to the utility customer when competition is introduced and exposes the existence of above-market costs.

As with pro-stranded cost recovery arguments, there are many opposing viewpoints that do not relate directly to regulatory compact concerns. A primary counter argument is the belief that recovery will effectively eliminate all or most potential customer benefits that may arise from competition. There may be little savings available to the customer once full stranded cost recovery is charged to them.

Opponents of full stranded cost recovery, while conceding that some categories of stranded costs may have been imposed on utilities (such as QF purchases), disagree with the notion that utility managements should not be held accountable for most generating resource decisions that ultimately led to stranded costs. They assert that utilities obviously had some degree of responsibility for their relative cost levels, a responsibility which is inconsistent with 100% assignment of above-market costs to customers. They point out that utility management had primary responsibility for resource decisions, and their ability to make these decisions was generally not significantly compromised by regulators or

legislators. In response to arguments that regulators approved these decisions, it is countered that some utilities canceled large construction projects (nuclear and otherwise) in the late 1970s and early 1980s, once again with the approval of regulators. Companies that made these decisions limited their stranded cost exposure compared to utilities that kept constructing units that contributed to overall industry excess capacity and high costs.

Stranded cost recovery is held by some to be anticompetitive because it essentially precludes other suppliers from securing the business of customers served by high cost utilities. This is because high stranded cost recovery makes the amount of money the customer can save by switching so small that even low cost competitors cannot afford to sell at a price below that level; and thus a competitive market will not develop.

In response to the argument that stranded cost recovery is necessary for true economically efficient electric competition (i.e., competition based on marginal costs), the counterargument is that such a belief is too much focused on "static efficiency," that is, an electric provider's marginal cost at a point in time. That type of analysis ignores "dynamic efficiency", which is defined as the change in marginal cost levels over time. Because stranded cost recovery is held both to remove significant incentives for utilities to lower their costs and become more efficient providers and remove incentives for competitors to enter the market, dynamic efficiency will likely be harmed by stranded cost recovery. The decrease in static efficiency that may occur as a result of no allowance for stranded cost recovery is alleged by some to be outweighed by the likely increase in dynamic efficiency if competition is introduced and little or no stranded cost recovery is granted.

Further, the disincentive for cost reduction alleged to be an inherent outcome of stranded cost recovery has several other bad effects, it is argued: utilities may devote

more effort to "finding" additional stranded costs to submit for recovery rather on efforts to lower costs and be more competitive, and such recovery will be a disincentive for utilities to retire inefficient generating units.

Stranded cost recovery, rather than being a means to level the playing field among potential competitors, is argued to be a reward to those utilities that have been least efficient in the past compared to those that have done a better job of keeping their expenses and rates down. In this regard, it is also pointed out that recovery would be unfair to those companies that took actions on their own to write down asset values potentially subject to stranding.

As for the allegation that failure to approve full stranded cost recovery will increase cost of capital for the electric industry, a common response is that introduction of competition is supposed to increase the cost of capital compared to utilities still operating as a monopoly. Utilities under current regulation can also earn either above or below their authorized cost of capital, with some utilities earning above their authorized return for significant periods of time. In addition, any increase in the required rate of return will be counterbalanced by the reduction in cost of capital for transmission and distribution utilities no longer involved in generation activities, if utility disaggregation becomes widespread. It is also argued that the prospect of competition in the electric industry is not a new or sudden development to investors in the electric industry, and that investment analysts have indicated that they do not expect full recovery of stranded costs to be granted.

In the area of rate of return, some studies have shown that over an extended period (from the early 1970s to the early 1990s), utility stocks have achieved a greater return overall than competitive industry stocks. All other things being equal, utility stocks should

earn a lower return than nonregulated companies as they face less risk. Since these studies show the opposite result, it is argued that utilities as a group have in fact earned excessive returns over a period of time, and these excess earnings should be assumed to be at least a partial recovery of stranded costs, if the utilities seek to recover them.

In response to the assertion that stranded cost recovery should be allowed to keep utilities from stalling the competitive transition in court, the counter argument is that stranded cost issues should be decided on the merits to the greatest degree possible, with "political" considerations secondary if they are considered at all. It is also usually noted that utilities made similar arguments about prudency and "used and useful" disallowances in relation to nuclear plants in the 1980s, and were largely unsuccessful in the courts.

Finally, in response to arguments that all stranded costs have at some point been found to be prudently incurred and therefore should be recoverable, it is asserted that stranded costs may fail to meet the "used and useful" ratemaking test often used along with the prudency standard in setting rates. (The used and useful test holds that an investment should not be reflected in a utility's rate base unless the regulator determines it to be both currently in use and useful to the ratepayer.) The theory is that investments exposed as uneconomic due to competitive forces cannot be thought of as "useful" to customers. Therefore, at the very least, the investment should not continue to receive a full return through stranded cost charges.

## CHAPTER VIII

## Impact of Stranded Cost Recovery on Key Stakeholders

### A. Introduction

The members of the Stranded Cost Working Group were asked to submit their ideas on what the impact of allowing or not allowing stranded cost recovery would be on the major stakeholders of the electric restructuring process: customers, shareholders and potential competitors. The following provides a summary of the comments received. It will be evident that there is a wide diversity of opinion concerning the impact of stranded cost recovery on key stakeholders, related to whether the commenter believes in full stranded cost recovery, or in no, or limited, recovery. Also, while the direction of the stranded cost impacts is generally clear (i.e., positive or negative), the extent of the impact depends upon the size of the allowance or disallowance in relation to the total amount of stranded costs identified.

### B. Impact on Customers

According to those parties that desire to limit stranded cost recovery to some degree, the primary impact of stranded cost recovery on customers is to potentially reduce the amount of savings associated with competition and restructuring that will be available to them, for the duration of the recovery period. Those who believe Missouri is a relatively low cost state fear that restructuring can actually result in an increase in rates, particularly for small consumers. (They hypothesize that current low cost power producers in Missouri will seek to sell in higher cost areas rather than Missouri, so as to maximize profits.) If, in fact, book values for assets are less than the market value, then customers will pay more

unless there were payments or some other sort of compensation for negative stranded costs. It is also alleged that stranded cost payments could be used as part of a strategy by incumbent providers to engage in predatory pricing in order to deter the development of competition, with the result that prices would be higher in the long term to consumers.

It is theorized that stranded cost recovery will have negative impacts on the dynamic efficiency of utilities. (This issue is generally discussed in Chapter VIII.) According to this theory, stranded cost recovery will act as a subsidy to those electric providers that are less efficient or economical, removing incentives for those firms to reduce costs in order to maintain or increase their market share. A policy of recovery could also discourage entrance into the market of new competitors, who must attempt to recover both fixed and variable costs in the prices charged, while the incumbent needs to compete only on variable incremental costs because the presence of nonbypassable stranded cost charges covers its fixed costs. Similarly, stranded cost recovery policies based on rate freezes which deny consumers access to competitive markets until the incumbent has "paid down" its fixed costs could create potential "super competitors", again placing potential competitors at a disadvantage. Overall, it is believed by these parties that stranded cost recovery will also result in a less vibrant competitive marketplace, with a decreased range of service offerings and reduced alternative supplier innovation in producing, packaging and delivering value added services.

Turning to those parties who favor full stranded cost recovery, the view that such recovery will limit consumer benefits is termed "simplistic". First, it is pointed out that all potential stranded costs are currently reflected in rates, and recovery should not lead to a rate increase. Second, a policy of denying stranded cost recovery could lead to a

situation where the most efficient supplier of electricity may not be chosen, when an incumbent with low marginal costs nonetheless does not win the sale because it cannot recover the sunk costs of the current regulatory structure. This phenomenon is termed "uneconomic bypass." (This economic argument is also addressed in Chapter VIII.)

In addition, pro-recovery parties assert that there will be opportunities for customers to save on their electric bills under competition, even when full stranded cost recovery is allowed. Potential cost reductions cited include the benefit on increased regional coordination of generation through use of independent system operators and enhanced bidding procedures for generation; lower reserve margins; and higher utilization of existing assets through such techniques as real-time pricing.

Some proponents believe that failure to allow for stranded cost recovery could increase rate pressure on smaller customers, if only larger and more sophisticated customers take advantage of competitive opportunities and leave their former suppliers' system, increasing the proportion of the system's fixed costs to be covered by the incumbent's remaining customer base that does not secure an alternative supply that is less expensive.

Finally, it is alleged that attempts to deny utilities fair and full stranded cost recovery will only lead to protracted court proceedings, with the advantages of competition potentially denied to customers for the duration of the legal dispute.

## C. Impact on Stockholders

Parties generally advocating full recovery of stranded costs cite negative impacts on electric utility shareholders from failure to provide for such full recovery. At the very

least, material disallowances can increase the cost of financing for affected utilities, and make them less able to compete in the marketplace. At the extreme, where certain utilities' stranded cost exposure may be greater than their entire stockholders' equity, bankruptcy may result from denial of stranded cost recovery.

Further, these parties supporting full recovery state that potential negative impacts of stranded cost policy on shareholders might result in financial relief ordered by the court systems, paid by taxpayers, if shareholders' federal constitutional rights or statutory rights are found to be infringed by stranded cost policymakers.

Parties favoring more limited stranded cost recovery note that negative impacts on shareholders from denial of recovery will, of course, be limited to shareholders of firms with substantial stranded cost exposure. Other current investor-owned utilities without such exposure may well benefit from policies placing significant limitations on stranded cost recovery. It is also noted that even if there is a disallowance of stranded costs, the resolution of uncertainty may have a favorable impact on the stock price.

It is also pointed out by these parties that allowing full stranded cost recovery, without restricting the receiving utilities' use of the cash, could lead to an enhanced ability by those firms to acquire lower cost firms or otherwise foreclose to some degree development of a competitive electric market.

These parties also assert that it will be difficult to ascertain exactly which shareholders will have suffered alleged damage from failure to fully recover stranded costs. To the extent that shareholders have already incorporated some expectation of failure to achieve full recovery of stranded costs in the future (and statements by financial analysts indicate they have), then the stranded cost issue has already had a negative

impact on stock prices. If some of the impacted shareholders have already sold their electric utility holdings, then these shareholders would have already sustained losses, and these individuals will not be compensated for their losses unless they can be identified and their losses quantified. On the other hand, individuals buying electric stocks after some expectation of failure to achieve full stranded cost recovery has been established, will achieve an undeserved windfall gain if policymakers later decide to allow full stranded cost recovery. In short, it is alleged that allowing full stranded cost recovery to minimize shareholder harm is a blunt instrument, with the relief not necessarily targeted to those shareholders that actually suffered the damage.

Proponents of recovery counter that this theory not only ignores the damage done to shareholders, but overlooks the negative effect on the incumbent utility. It assumes that because all of the shareholders who have been harmed cannot be identified, no compensation is due to any. They also point out that if expectations deteriorate that the government will fulfill its obligations, the cost of acquiring funds for new investment will rise, thus inhibiting the ability of the incumbent utilities to compete and potentially to survive. It is asserted that this would distort future competition in favor of new entrants.

## D. Impact on Competitors

The impact of stranded cost recovery policy on the development of competitive markets is noted to some extent in the above discussion. The only other comments received regarding the potential impact of stranded cost policies on the future competitive market for electricity concerned the need for stranded cost payments to apply equitably to all electricity users within an incumbent provider's service territory. In particular, any

stranded cost recovery mechanism that would disproportionately impose those costs on customers who desire to use alternative service providers will both reduce the potential for consumer savings and reduce the amount of potential competition. The concern remains, however, that significant stranded cost compensation to utilities with high fixed costs and relatively low variable costs will place potential competitors at a disadvantage since they do not have any guaranteed recovery but must recover 100% of their costs in the competitive market.

## CHAPTER IX

## Collection Methodology

The preceding chapters in this report have dealt with a variety of issues pertaining to the identification and quantification of potential stranded costs. After all of this analysis has been completed, a decision must be made concerning how to collect any positive stranded cost balance that is allowed for recovery from consumers, or to amortize any negative stranded cost balance that is identified as appropriately credited to consumers.[26]

*This chapter addresses collection methodology in two dimensions. The first is the* cost of service/rate design dimension which involves how costs are apportioned among customer classes and then attributed to customers within customer classes. The second dimension is the temporal dimension, which involves a consideration of whether historic or current electrical requirements of customers should be used in applying the collection factors.

Regardless of how the stranded cost issue is resolved for any given utility, the Working Group believes that it is appropriate for any charges or credits to be confined to the customers of each individual utility. Spreading these charges or credits across the customers of other utilities would not be appropriate.

### A. Cost of Service/Rate Design Dimension

Books could be (and have been) written about all of the various cost of service and rate design issues. For purposes of this report, it is not necessary to engage in an

[26] Even if it is determined that stranded cost recovery is not necessary or appropriate, the existing rates must still be unbundled so as to identify the component which recovers generation costs.

extended discussion of the various theories which underlie cost of service and rate design, but it is necessary to outline certain basic considerations which influence cost of service and rate design regardless of the particular theories employed.

A review of electric utility tariffs reveals substantial differences among customer classes. Rates for residential and other small customers tend to be fairly simple in structure, usually consisting of an energy charge per kilowatthour (which may be seasonal) and sometimes a separately stated customer charge. In theory, the customer charge collects costs that are relatively uniform from customer to customer and which do not vary as a function of consumption. This includes such things as metering, meter reading, billing, etc. The energy charge collects both the energy-related costs and the demand-related costs.[27]

Rates for larger commercial and industrial customers tend to be more complicated because they separately assess customer charges, energy charges and demand charges. In addition, these rates often reflect features which are sensitive to seasonality of load pattern and the voltage level at which electric service is taken. Rates for these categories of customers have typically reflected these more detailed pricing considerations because of the diversity of characteristics among the customers within these classes and because the cost of metering was reasonable in relation to the value added because of the ability to price separately for the demand and energy components of service.

[27] As a general rule, the energy-related costs consist of those items which tend to vary as a function of the number of kilowatthours purchased. Fuel and some generation maintenance expense are primary examples of variable costs. The demand-related costs are those which tend to be incurred as a function of the demand of customers for electric power at peak time(s).