



American Nuclear Society

**STRANDED COSTS AND OTHER ECONOMIC  
CHALLENGES IN ELECTRIC UTILITY  
RESTRUCTURING**

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**Washington Internships for Students of Engineering (WISE)**  
**August 1998**

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## **WISE**

Washington Internships for Students of Engineering (WISE) is a ten-week program that allows students with senior status to spend the summer in Washington D.C. learning how engineers contribute to the public policy making process. The students meet with government officials and other policy makers to discuss complex policy issues relating to engineering, science and technology. The culmination of this internship is a research paper analyzing a policy issue of interest to the student and his or her sponsoring society.

For addition information about the WISE Program, contact: WISE, Attn. Anne Hickox, 400 Commonwealth Drive, Warrendale, PA 15096-0001 ,(412)776-4841, or fax (412)776-2103.

## **ACKNOWLEDGMENTS**

First, I would like to thank the selection committee who gave me the opportunity to spend the summer learning about public policy, and how individual engineers can make an impact in this arena.

Next, I would like to thank my sponsoring society, the American Nuclear Society, for being so supportive of all my activities. My society advisors, Dr. Alan Levin and Dr. Gail Marcus, have provided feedback and direction while I wrote my paper.

Thanks to Dr. Wolf Yeigh, WISE 1998 Faculty Member in Residence, who worked closely with me in developing my topic and providing helpful feedback. I would also like to thank Dr. Yeigh for setting up invaluable meetings we had during the summer.

I would especially like to thank the staff at the Nuclear Energy Institute (NEI) for giving me so much insight into my paper topic. In particular Angie Howard, Adrian Heymer, Valerie Kait, Richard Myers, and many other supportive staff members who enlightened me on my research topic. I would also like to thank NEI for the office space and other supportive services.

## EXECUTIVE SUMMARY

Restructuring of the utility industry was started as an unintended consequence of the Public Utilities Regulatory Policies Act of 1978 (PURPA). It provided the electric market with Qualifying Facilities, where utilities had to purchase power from. Some of these facilities were very competitive, and proved the advantages of a competitive market structure. In 1992, congress passed the Energy Policies Act of 1992 (EPACT) to open the industry up to wholesale power sales by *non-utility* generators. These generators further progressed the argument for competition.

Stranded cost issues are providing the greatest challenges for policy makers addressing utility restructuring. Stranded costs refer to the sum of all assets and liabilities whose book value exceeds market value in a competitive environment. The greatest stranded costs are attributed to nuclear industry investments and future fuel and power contracts. Most nuclear stranded costs are due to plants built during a difficult financial and regulatory era. This paper will examine stranded cost issues and pricing mechanisms for stranded cost recovery. The type and duration of pricing mechanisms adopted by policy makers will set the direction for the future utility industry.

Equality in taxation, particularly property taxes, will be another significant topic in utility restructuring. Utilities have been a "silent" tax collecting tool for years, but competition will force disclosure and push for tax neutrality. The four main utility groups including: Investor Owned Utilities (IOUs); Cooperatives (co-ops); Municipalities (munis); and Federally owned utilities have different taxation laws placed upon them. When these taxation differences can not be resolved through a regulatory rate base, as is the case currently, policy makers will need to address the current tax laws.

Policy alternatives for stranded cost issues should take into account significant historical events that have shaped the utility industry. Pricing mechanisms, for stranded cost recovery, should be responsive to market dynamics, yet resilient to legal challenges. These mechanisms protect the consumer by correcting for overestimation of stranded costs, yet also protect utilities from future stranded cost litigation. Decommissioning cost recovery should be separated from normal stranded cost arguments, because nuclear decommissioning concerns the health and safety of the American public. Mechanisms for decommissioning were well established by the Nuclear Regulatory Agency, prior to utility restructuring events, and thus should not be arguable as other stranded costs are. For the sake of economic stability, a majority of stranded cost arguments should be accepted. A time period of four to seven years is an appropriate amount of transition time for utilities to collect stranded costs and mitigate their high cost capital. Solutions for equal property taxation include replacement of property taxes for a consumption tax on electricity or equally assessing property taxes to all utility groups. Extensive tasks exist for policy makers in finding solutions to these pressing issues involving stranded costs and taxation.

## INTRODUCTION

### ***From Regulated to Competitive Market***

The electric utility industry is undergoing significant changes that will affect residential, commercial, and industrial consumers of electricity. Currently, the utility industry is moving from a regulated to a competitive market. Consequently, the American public will need to be more aware of events that are changing the fourth largest industry in the United States, with \$210 billion in sales.<sup>i</sup> The utility industry has been a controlled monopoly. Public Utility Commissions (PUCs) set the utility price and appointed sellers of electricity. The regulators and utilities agreed on the rate, which gave enough return to cover their generation, transmission, and distribution costs along with allowing the investors a 'fair'<sup>ii</sup> rate of return on their investment.

This study will address stranded cost issues involved in utility restructuring and taxation equity challenges currently faced by policy makers. These economic issues will have direct impact on transition time to a competitive free-market, economic stability in the utility industry, and the savings electricity consumers will see in the short term.

Stranded cost recovery and taxation equity decisions made at federal and state levels have a significant impact on the path electrical restructuring takes. Currently, twelve states have passed legislation for utility competition. Another six states have a comprehensive regulatory issue ordered.<sup>iii</sup> Many stakeholders are taking part in the ongoing debate of how the utility industry should be effectively moved from a regulated market to a competition based market.

As a competitive market evolves, transmission control will have an important impact on stranded cost recovery. Many of the stranded cost recovery pricing mechanisms rely on unbiased transmission control by groups other than Investor Owned Utilities (IOUs). IOUs can create detrimental market power, which could stifle competition rather than encourage it. For this reason Independent Standard Operators (ISOs) are encouraged to control transmission networks. ISOs are independent, non-profit groups that oversee transmission networks. These groups have no conflicts of interest with market participants. ISOs play an important role in assuring stranded cost recovery, through *transmission* pricing mechanisms, is carried out in a neutral manner. ISOs will be covered further in the *FERC Orders 888 and 889* section of the introduction.

## ***Regulated Market and PUHCA***

Stranded costs have evolved as a result of the restructuring taking place in the electric utility industry. To fully understand why stranded costs are occurring, one must first consider the significant historical events that have shaped the utility industry and the forces that are pushing this industry in a competitive direction. Some of the key historical facts will be presented in following introductory sections.

The structure of the utility industry, including the different utility groups and regulatory bodies, contribute to both stranded cost and taxation difficulties now faced. In the early half of the twentieth century, electric utilities grew quickly in a competitive environment. In 1935, the government decided that utilities tended to monopolize<sup>iv</sup> and were most efficient when vertically integrated. Ensuing legislation allowed for controlled monopolies which were responsible for the three functions of the electrical industry. The functions are generation, transmission, and distribution of electricity. Generation is the production of electricity by means of fossil fuels, nuclear, hydro, or other renewable source. Transmission is transporting of electricity from a generating facility to a distribution center. Distribution is the final delivery of electricity to the user. There are currently four main types of electric utilities. These include Investor Owned Utilities, cooperatives (co-ops), municipalities (munis), and Federally owned utilities. IOUs are utilities that earn a return for investors, where the profits are either distributed to stockholders or reinvested into the company. Municipalities are non-profit State and local government agencies. Cooperatives are member-owned utilities that were set up to serve areas that other utility groups did not find economically viable to serve. Federal owned utilities are non-profit power producers such as the Tennessee Valley Authority, which distributes power mainly to co-ops and munis.

The Public Utility Holding Company Act of 1935 (PUCHA) allowed for regulation of utilities by the Securities and Exchange Commission (SEC). The SEC was allowed to break up large interstate holding companies, thus reducing the industry to regulated regional suppliers of electricity. The SEC regulates corporate restrictions. Interstate electrical commerce was regulated by the Federal Power Commission (FPC), which in 1977 became the Federal Energy Regulatory Commission (FERC). FERC regulates interstate transmission and has final approval of utility mergers. PUCHA broke up powerful utility trusts in the 1930s. It is argued that PUCHA has served its purpose and is now obsolete in the competitive restructured environment.<sup>v</sup>

## ***Socioeconomic Considerations of 1970s***

During the 1970s a number of noteworthy events took place that shaped the structure of the electrical industry. These political and societal events lead to many of the stranded cost arguments that are being addressed today. The consideration of adequate energy supply, and its role in national security, drew much attention. Secretary of Defense Harold Brown, in President Carter's administration, was quoted

as follows: "*The present deficiency of assured energy resources is the single greatest threat ... to our security.*" During the Cold War the U.S. was also concerned that the Soviet Union would capture the world market for building nuclear generating facilities.<sup>vi</sup> These concerns were an impetus for expanding nuclear power generation in the U.S. In evaluating these events a person must keep the time period in context, but it is also important to acknowledge that very large investments in alternative power sources, especially nuclear generation, were made and can not be ignored by current policy makers. Another important consideration that has contributed to stranded costs involve Construction Work In Progress (CWIP) and Allowance for Funds Used During Construction (AFUDC) funds. AFUDC and CWIP were interest accrued funds on money borrowed to finance construction. Even though interest rates for construction were high, states prohibited utilities from including the interest costs in the rate base until the plant was completed. Consequently the allowance fund was capitalized in the property accounts. This had negative economic effects on plants that took many years to complete, and could double or triple the actual material and labor costs of a plant. A few of the major events, that shaped demand for new nuclear power plants and the regulatory environment they were built in, are provided below.

### *Oil Embargo*

In October of 1973, the Arab Oil Embargo by the Organization of Petroleum Exporting Countries (OPEC) drove fuel prices up and forced U.S. energy policy makers to expand electrical generation by non-fossil fuel burning plants. In 1972, oil and gas supplied 37% of total U.S. electricity generation.<sup>vii</sup> A need to offset our dependence of foreign oil was of utmost concern. Because of this concern the U.S. turned to alternative sources of power.

### *Demand for Alternative Power*

Due to the great socioeconomic conditions explained in the previous sections, nuclear power generation became a popular solution in solving our nation's excessive reliance on fossil-fuel derived electricity. Of all the nuclear plants ordered, 43% were ordered in 1972, 73, and 74.<sup>viii</sup> The fact that policy makers advocated the need for nuclear power can not be ignored. Policy decisions concerning nuclear-related stranded costs should take into account previous support for these *long-term* capital intensive investments.

### *Three Mile Island*

After the Three Mile Island nuclear power plant accident, tighter regulation and stricter plant construction rules made the cost of building a nuclear generating plant increase greatly in the 1980s. Due to construction delays and high interest rates in the 1980s, some nuclear plants totaled five times the original cost estimates.<sup>ix</sup> This issue has contributed to stranded costs being claimed by utilities who built nuclear facilities in the 1980s.

### ***Results of 1978 PURPA and 1992 Energy Policy Act***

The Public Utility Regulatory Policies Act of 1978 (PURPA) and the 1992 Energy Policy Act (EPACT) were the main catalyst in initiating competitive change in the electrical industry. PURPA was an act which opened wholesale markets to non-utility generating facilities. This was the first time that utilities were able to purchase power from outside sources. PURPA was passed to promote investments in renewable energy sources called qualifying facilities (QFs). QFs fall into two categories-Cogenerators and Small Power Producers. Both are guaranteed that utilities will purchase power at "avoided costs", the cost the utility would incur generating that power. EPACT further opened the markets by allowing Exempt Wholesale Generators (EWGs) to enter the wholesale market. EWGs are exempt from PUHCA regulation. Unlike requirements for QFs, utilities are not required to purchase power from EWG's. Both of these non-utility groups proved that competition was beneficial with respect to lowering electricity production cost and promoting innovative technologies within the industry.

With the advent of QFs and EWGs it can be seen that technological advance is being obtained through controlled free-market competition. The free-market forces are prevailing over the monopolized regulated markets of the past. The new technologies in generating facilities are cheaper and faster to construct, lowering their overall cost of electricity. This, in effect, lowers the barrier prices to enter a previously very capital intensive industry. The new facilities are more efficient than the older ones also. One of the most recent generators is the combined cycle gas turbine, which has efficiencies up to 60%, compared to conventional power plants that attain between 35-46% efficiencies.<sup>x</sup> These plants have a short capital recovery period, and thus have been significant in leading the industry where it is today.

### ***FERC Orders 888 and 889***

FERC Orders 888 and 889 were the precursor to setting up the new open access transmission system. Because many of the stranded cost recovery mechanisms are implemented through transmission, it is important that an independent group operates the transmission grid. Transmission could be very lucrative for current utilities that own these lines. This is due to a number of facts including difficulty in getting right-of-way to construct more lines and the opportunity to create unfair transmission pricing. For these reasons, relating to fair access to the transmission grid by all producers,

Independent Standard Operators (ISOs) were recommended by FERC. <sup>xi</sup> Currently, the U.S. is divided into 152 regional *control areas* that are responsible for grid reliability and control. ISOs are groups of *control areas* that are combined for further transmission efficiency. Four ISOs are in operation currently. They include the California ISO, Texas ISO, and two northeastern ISOs. Twelve states are included in these four ISOs. Order 888 is the Open Access Rule by which transmission owners are required to give point-to-point and network transmission access. Order 889 requires an establishment of an electronic system to share information about grid transmission capacity. All generators will have access to load information at all times through the Open Access Same-time Information System (OASIS) Rule. <sup>xii</sup>

The rule also requires utilities to separate wholesale power marketing and transmission operating groups within a company, due to conflict of interest concerns. Recent problems with OASIS and the ability of power marketers to access up-to-date transmission data has raised questions of whether the new orders are effective.

### ***Stranded Costs Definition***

The way utilities cost things out in a regulated market is quite different than the arguments a banker or financier requires in a competitive market. To more fully understand what happens in going from a regulated to a competitive market one must have a full understanding of stranded cost definitions. Stranded costs refer to the sum of all assets and liabilities whose book value exceeds market value. Stranded benefits are the sum of all assets whose market value is higher than book value. <sup>xiii</sup> The difference between stranded costs and stranded benefits are the net stranded costs that will be referred to in this paper. Stranded costs incurred by utilities going from a regulated market to a competition based market involve reevaluation of assets and liabilities a utility has on its balance sheet. The total amount of stranded costs is estimated at 100-200 billion dollars. The stranded cost recovery claims vary greatly from state to state. Resource Data International, a respected industry analysis group, suggests: *"...ten states with the highest stranded cost exposure account for 86% of the problem, but only 43% of the market."*<sup>xiv</sup> From these figures it can be seen that stranded cost issues are not a national problem, but rather a regional problem. The regions with the greatest stranded cost exposure include California, Illinois, Texas, and Northeastern States.

### ***Four Types of Stranded Costs***

Stranded costs come from four independent groups - power plants, long-term power and fuel contracts, regulatory assets, and social programs. <sup>xv</sup> Power plants, which are generation facilities, can become stranded assets in a competitive market if their

generation cost of electricity is greater than the market price. Some power plants were built in an era, late 1970s to early 1980s, where interest rates were very high. The CWIPs for some nuclear plants were especially exorbitant during this period. These high cost investments are now stranded costs. Once the plant was done, it was factored into a regulatory long-term rate base. Some of these implicit regulatory contracts have ten or more years left in their cash flow accounting sheets. If a regulatory group agreed with the utility, as far as need for the added capacity, the utility could make an argument for stranded plant assets. Long-term purchased power agreements are contracts which power companies agreed to buy to lock in a price for a long period of time. The price the utility agreed upon may be more than the current market value of that fuel or power. The contract, if not renegotiable, becomes a stranded liability. Some of these contracts were required as part of the Public Utilities Regulatory Policies Act of 1978 (PURPA). Stranded fuel contracts concerning coal have a significant effect on the cost-effective operation of some large coal-fired power plants. Regulatory assets include intangibles such as deferred debt cost and accelerated depreciation that appear on a utilities balance sheet in a regulated market, but are not accounted for in a competitive market. Social programs include low-income subsidies, weatherization assistance and other programs that benefit the public, but are generally not cost-effective in a competitive market.

### Stranded Cost Calculation

The three basic methods for formulation of stranded costs are Market Based Valuation, Up-Front Administrative Valuation, and Ongoing Stranded Cost Calculation. Market Based Valuation puts the assets up for sale to determine their actual market value. The market value is then compared with the book value. The difference between the higher book value and the actual market price is stranded. This stranded amount is collected in some sort of transmission pricing mechanism. The Up-Front Administrative Valuation approach estimates stranded costs as a function of future revenue. First, the cash revenue stream after restructuring is estimated. Then, the predicted regulated-market cash flow of the assets is subtracted from the restructured-market function. The approach allows for an accurate time period in which stranded cost recovery can be spread over. Ongoing Stranded Cost Calculations calculate stranded costs on a yearly

basis. This method allows for yearly fluctuations in market valuations of stranded costs. Unlike the previous two valuation methods, Ongoing Stranded Cost Calculations is more dynamic.<sup>xvi</sup>

### Nuclear Industry Sunk Costs

Special consideration must be taken when policy makers are considering stranded cost recovery for large nuclear plant sunk costs. These costs are unique to nuclear plants built in the 1970s and 80s, and they are legitimate stranded assets in the majority of cases claimed. Sunk costs in the nuclear industry involve capital expenditures for nuclear generating facilities, which because of restructuring of the industry, will not be amortized through the implicit regulatory contract that exists between a regulatory body and the utility owners. These capital investments were for specialized equipment for nuclear plants. These facilities have a particular use and market. It would be uneconomical to have these assets transferred to other uses. As Gregory Sidak states, in speaking of sunk costs:

*The notion that the need to sink costs favors incumbents justifies price regulation to control the monopoly power of incumbents; conversely, technological change that reduces the need to sink costs creates opportunities for deregulation. Alternatively, the presence of sunk costs justifies regulatory entry barriers put in place to allow incumbents to recover their capital investment costs.*<sup>xvii</sup>

Sidak is an authority on deregulation of network industries at American Enterprise Institute. He has written many legal/economic publications on restructuring of regulated markets. This argument would justify stranded cost recovery for sunk costs in the nuclear industry. Other analysts believe that sunk costs are not as important as operation costs, which are not included in stranded cost recovery arguments. As General Public Utilities System (GPU) stated in a recent article about economics of running a nuclear plant: *"The plant's sunk costs are not as important as its going-forward costs."* Going-forward costs include costs for operation and maintenance, fuel and administration.<sup>xviii</sup> Much of the nuclear industry sunk costs are related to plants that were put into service between 1974 to the early 1980s.<sup>xix</sup> A combination of stricter regulation by the Nuclear Regulatory Commission (NRC), double-digit inflation through the 1980s, and lengthy construction led to nuclear plants that cost four to five times the original estimates.<sup>xx</sup>

### Nuclear Decommissioning Costs

Decommissioning costs are costs financial owners of nuclear plants pay over the life of the a plant to insure proper shutdown and cleanup of the site. Decommissioning funds were set up for safety and health reasons, thus they should not be subject to debate as other stranded costs are. If a nuclear plant has a license for a set number of years, the decommissioning costs are collected through part of the implicit regulatory contract over the years that plant operates. When a State Public Utility Commission (PUC) sets rates, decommissioning costs are figured into the agreed upon rate. In a deregulated

market, the contracts that nuclear facilities have with the NRC for decommissioning, do not disappear. These contracts become legitimate, *non-arguable* stranded costs in a competitive market. As of 1995, the amount of decommissioning costs left in various contracts totals \$27 billion dollars.<sup>xvi</sup> Most of the PUCs, except for New Hampshire's, accept that this is legitimate stranded cost recovery. To this extent, the Public Service Company of New Hampshire, which holds a nuclear facility, is bringing legal action against the New Hampshire Public Regulatory Commission. Another issue that must be addressed, in context of decommissioning stranded liabilities, concerns the acceptance and disposal of highly-radioactive nuclear waste at long term storage site. A number of nuclear facilities are currently running out of space for spent nuclear fuel. Nuclear plant investors believed that the Federal government would work with private industry in finding a disposal site for high-level radioactive waste. If plants have to close down prematurely, or have to implement an alternative storage plan (i.e., dry cask storage, alternative temporary storage at an intermediate site) decommissioning costs can be significantly higher than original utility allocations. This liability is a cost (or risk allocation), which utilities will argue for as a regulatory stranded asset. Most states, that have implemented restructuring, allow the IOU's to collect the remainder of their decommissioning costs through a non-bypassable transmission and distribution charge. New Hampshire is the only state that wants nuclear decommissioning covered under a variable stranded cost argument, which leave future decommissioning stranded costs open to debate. It is also argued by some states, which may have net stranded benefits, that the excess profit should be used to pay for decommissioning stranded costs. As Minnesotans for an Energy-Efficient Economy (ME3) put it: *"Minnesota legislators should make sure that the costs of nuclear decommissioning and waste disposal in Minnesota are fully paid out of the windfall profits from competition, not transferred by the slight of hand to the public."*<sup>xvii</sup> This action would only be appropriate if the company responsible for the nuclear decommissioning costs also owned assets that provided stranded benefits. A state may have net stranded benefits, yet particular utilities may have stranded costs. In extreme cases it may be more economical to shut a plant down. This decision is made when the *"expected discounted value of future operating profits falls below the cost of decommissioning."*<sup>xviii</sup> More information on nuclear decommissioning is provided in the *Financial Decommissioning Assurance* section and *Key Conflicts and Concerns*.

### *Future Fuel and Power Contracts*

Another non-nuclear area that contributes significantly to stranded costs, involve future fuel and power contracts. Future fuel contracts effect mainly coal-fired generation plants. These plants have long-term fuel contracts at prices that are uneconomical in a competitive market. Until these contracts expire, they leave a utility with high cost of production relative to coal plants that are not under long-term contracts. Power contracts were part of PURPA. Some of the power contracts, where utilities must buy from renewable sources, are not economical in a competitive atmosphere. Some

restructuring initiatives in states still provide clauses that protect these investments in renewable, alternative -fuel plants for the sake of continued research into these areas.

### ***Pricing Mechanisms for Stranded Cost Recovery***

When it is agreed that stranded cost were "prudently" incurred by the utilities under regulatory conditions, then the question is how to price the stranded costs into the rate structure. There are currently a number of different approaches that address different consumer groups in a competitive market. The way these pricing mechanisms are implemented, along with the stranded cost recovery transition period settled on, will have a significant effect on how quickly the free-market can bring benefits of competition to both industrial and residential consumers, while concurrently ensuring economic stability among utilities. The transition period can be long (3-10 years), where economical stability is stressed, or transition can be short (3 years or less). In the shorter period competitive prices are more quickly realized at a sacrifice of economic viability of incumbent utilities. States are in a difficult position in not wanting to economically disadvantage incumbent utilities, which bring a lot of revenue to the state (i.e., tax and new business revenue), while at the same time trying to promote innovation through competition, which drives prices down. States are setting up different legislative packages of pricing mechanisms for recovery of stranded costs. The following pricing mechanisms are a few of the most popular options.

#### *Transmission Pricing*

Transmission pricing applies a non-bypassable transmission tariff on all electricity sold. The same tariff applies to residential, commercial, and industrial consumers. Transmission pricing is non-discriminatory. Customers that leave incumbent providers for a competitor would pay the same stranded cost recovery amounts as a customer who does not leave. An important point regarding transmission pricing involves the ISOs previously mentioned. These groups assure fair collection and distribution of transmission tariffs collected.

#### *Entrant/Exit Fees*

Entrant and exit fees discourage current electric consumers from leaving an incumbent utility for cheaper power producers, leaving the incumbent utility with stranded costs. Exit fees are non-bypassable charges an electricity consumer gets charged if they opt for a different provider. Money that was invested in generating facilities, intended to supply the leaving customer under the regulated market, can then be put toward repaying high cost capital that becomes stranded. Entrant fees are fees added to incoming producers' electricity, letting incumbent producers collect for their stranded costs, while at the same time making the incumbent's electricity more competitive. Both

of these fees are applied during a transition period of three to ten years while the industry is restructuring. In some situations, such as California, it is not economical for incoming power producers to market electricity to retail customers until after the transition period. An incoming competitor, Enron, from California stated: " *First and foremost, California's market structure and rules leave little if any room to offer residential consumers a reason to switch during the transition **and** give our shareholders an acceptable return on their investment ...*" <sup>xxiv</sup> This points out the difficulties encountered by new competitors coming into the formerly regulated market when entrant fees are applied. The laws passed in California favor the incumbent utilities.

### Securitization

One pricing mechanism for recovery of stranded costs, that many state legislatures are adopting, is securitization. Securitization is a type of asset-backed security (ABS). The utility sells bonds to cover claimed stranded costs. A utility may sell some of its future revenue as an asset it wishes to use for bond pay back. The interest paid is quite low (7-9%) if a *credit enhancement* feature is included in the bond. The *credit enhancement* comes in the form of a guarantee in restructuring legislation from a state. The guarantee protects the bondholders investment with state backed tax revenue in the case the utility becomes financially insolvent. With this guarantee the utility locks in its stranded costs. Securitization is legally binding and difficult to break. For this reason it is appealing for utilities, who would then have a strong legal case against future attempts to challenge that bond revenue. This pricing mechanism, like the previous two, prevents a truly competitive atmosphere from emerging directly after restructuring. It would be difficult to incorporate a true-up mechanism, one which adjusts for changes in the market value of stranded costs, with securitization's legally binding nature. <sup>xxv</sup> Because of this, many states only issue a percentage of stranded cost recovery amounts with securitization. Securitization will be examined fully in *the Policy Alternatives* section.

### **Tax Issues**

Along with the stranded cost issue, taxes present another difficult economic factor in utility restructuring. Taxes present a number of difficulties. Tax issues must be dealt with in a way that compensates for the fluctuations of a competitive market and ensures a level playing field for all utility groups. Tax revenue from the utility industry provide large revenues for state and local governments. The potential for lost tax revenue, through lower competitive prices, must be compensated for during restructuring and into the future when the greatest price reductions are expected. Another pressing issue is the equality of taxation on various utility groups. To provide for a level playing-field in a competitive atmosphere, all utility types must have similar tax payments. Currently these groups vary a great degree in taxation by local, state, and federal

government. Taxation problems also arise with sale of assets. In the emerging markets, many mergers and sales are taking place. If the market value is much lower than the appraised property value, room for property tax reassessment exists.

### Federal Tax Laws

IOUs and some co-ops currently pay a maximum federal corporate income tax of 35%.<sup>xxvi</sup> The other utility groups, and majority of co-ops, are not under federal income tax legislation. Federal taxes are also collected on nuclear decommissioning funds. A special deduction was recently legislated, but the deduction only holds under cost-of-service ratemaking. Under a competitive environment the cost-of-service would be zero, thus a revision in tax rules would be needed for continuance of this deduction. Cost-of-service refers to the agreed upon rate base set by the PUCs and an incumbent utility, which is nullified in a competitive market.

### State and Local Taxation Losses

There are many more state and local tax issues than federal tax concerns. State governments receive substantial taxes through and from the electrical industry. This is one of the reasons that states will try to position their incumbent utilities in a positive position relative to neighboring states' utilities. The health of the state economy is directly proportional to the health of the electric industry. Another significant issue is property taxes generated for local county governments. For example, many town and county governments receive property taxes from large coal-burning or nuclear generating facilities. These taxes produce millions of dollars for local governments. If these taxes are reduced, residential property taxes will go up inversely. These towns could see great economic hardships. State and local tax issues will likely provide the fuel for interstate legal battles. Further information on tax issues will be provided in the *Taxation Challenges* section.

### **Stakeholders**

Views on stranded cost recovery vary greatly depending on which stakeholders are addressed. Some major utility groups with a vested interest in stranded cost and taxation issues include: Investor Owned Utilities; municipalities; cooperatives; and Federal owned utilities. Other groups that have an interest in restructuring include: residential; commercial; industrial; shareholders and investors; special interest groups (i.e., Low-Income Advocates, Trade Organizations, Environmental Groups) ; and State/Federal Government Agencies.<sup>xxvii</sup> There are many more stakeholders in this debate not listed. Listed below are the major interest groups and the different tax and regulatory jurisdictions that govern them.

The aforementioned four major utility groups are operated under different regulatory jurisdictions which leave many questions as to how policy makers can pass effective legislation that encompasses the regulatory differences. An understanding of the regulatory differences will aid policy makers decisions. Public Utility Commissions (PUCs) do not regulate retail rates charged by municipalities and co-ops. PUCs do regulate IOUs and set entry rules into the generation business. Co-ops are generally directed under state laws and are directed by a Board of Directors. Municipalities are controlled by local governing bodies like the city council or an independent utility board. Munis usually only purchase power, for retail distribution, from Federally Owned Utilities. Some munis do own generating facilities where tax issues may surface. Property taxes are imposed for both real and personal property. Definitions of 'real' and 'personal' vary in different states. Real property generally comprises land and buildings, where personal property would include generators and transmission assets. In Minnesota the local county tax assessors work in joint with the state's department of revenue in assessing property taxes. The county governments will assess land values and report the findings to the state tax regulators. Most co-ops are exempt from federal and state income taxes. Federal electric utilities are exempt from federal, state and local taxes.

## **KEY CONFLICTS AND CONCERNS**

### ***Amount of Stranded Cost Recovery Allowed***

How strongly a state's utilities can argue they made their investment decisions under the implicit regulatory contract, will determine how much stranded cost recovery claims will be honored. This question is one of the most debated issues in utility restructuring. Stranded cost recovery is more of a state issue than a federal issue, except in cases that become litigious, in which case the Supreme Court will decide whether stranded costs are legitimate. The question, how much should be allowed, varies greatly depending on which interest group you are in. States are currently resolving stranded cost arguments.

### **Utilities' Argument**

Utilities that argue for stranded cost, claim that under the regulatory environment they were encouraged to make long-term capital investments in new generating plants and long-term power and fuel contracts. Under these implicit regulatory contracts the utilities were allowed to spread their costs out over a certain time period in which ratepayers were to cover the cost along with utility stockholders. If the government fails to honor stranded cost arguments, a number of detrimental consequences could further the delay of restructuring. In some situations new competitors can underprice

incumbent utilities, even though the new competitor produces electricity more inefficiently. As Sidak and Baumol state:

*Suppose that a particular utility is more efficient than a rival and can consequently generate electricity at an incremental cost, say, 10 percent lower than the latter's. If the utility's inherited cost obligation are 20 percent of its incremental costs, its less-efficient rival will clearly be able to underprice the utility.<sup>xxviii</sup>*

This situation leads to the promotion of inefficient producers, defeating the assumption that a competitive market increases innovation. Caution must be taken when evaluating incumbents inherited costs. Another utility argument has to do with reliability of service provided. If an incumbent utility is forced to reduce its prices and absorb the stranded costs it should have been entitled, the company may try to save costs by cutting corners. This may allow for short-term payoffs, but this is economically risky and will hurt the company in the long run, and thus lowers reliability. Most recently service reliability was compromised due to shortage of capacity experienced in northern Illinois. Rolling blackouts, where power is temporarily shut off in some areas for short periods of time, were implemented. As companies prepare for a free-market, inefficient plants will be taken off line. If stranded cost recovery is not allowed, more plants will be at economic risk. In essence, stranded cost recovery over a short transition period allows the utility to safely make necessary adjustments to the competitive market. Taking too many uneconomical plants off line in a short period of time leads to service reliability concerns.

### Industries' Argument

Industrial groups continue to push for as little stranded cost recovery allocations as possible, because stranded cost will stall competitive pricing of electricity in the short term. For many industries, electricity is a major cost of production. They realize that during the transition period from regulated to deregulated market they stand to gain more with fewer stranded cost mechanisms implemented. They will be paying the most for stranded costs based on how much energy they use. Large industrial consumers will often leverage states and utilities against each other while seeking the lowest electricity prices and taxation areas possible. Normally industrial lobbies do not side with residential consumers in many policy areas, but they stand together on the stranded cost issues. Neither wants to absorb stranded costs. It is interesting to know that industrial consumers stand to benefit the greatest from restructuring in the short term, due to their leverage. In respect to nuclear stranded costs, these industrial consumers have continued to support what is in the best interest of their bottom line. This letter, concerning nuclear energy policy, was presented to President Ford in 1974:

*We believe that the world faces the most serious economic threat since the Great Depression... The energy crisis has undermined*

*the world's financial structure to the point of threatening collapse and a worldwide depression...*

*America must move rapidly to increase domestic supply of energy ...the nation needs major programs of research on nuclear energy (both breeder reactors and fusion)..*

This letter was signed by CEO's of major electricity consuming industries including Alcoa, B.F. Goodrich, Allied Chemical, General Mills, and 96 more very large companies.<sup>xxix</sup> Many of these same companies do not support nuclear related stranded cost recovery. Because of the large amounts of money under stranded cost consideration, and because industry has a strong lobby which has great influence on policy makers (both present and past), this sector should not get unfair price advantages relative to the residential consumer, during a stranded cost transition period.

### Consumers' Argument

A number of different consumer groups are involved in restructuring lobbying. A couple include the Electric Consumers Alliance (ECA) and Citizens for a Sound Economy (CSE). Different consumer groups have different views on how stranded costs should be handled. The Electric Consumers Alliance is a group of over sixty consumer, government, and business organizations. Their purpose is to provide representation for residential and small business consumers. CSE recommends economic strategies focusing on promoting a favorable business climate with low tax and regulatory burdens. CSE and ECA support restructuring, but do not support stranded cost recovery. Many residents in the mid-west do not want competition unless it means reduced prices. These groups are referred to as *protectionist*.<sup>xxx</sup> Protectionist fear that prices in low-cost states will increase if their state allows regulatory reform. Protectionism will be covered more completely in the *Late State Entry* section. In California, consumer groups petitioned to amend the current legislation that implemented competition in January of 1998. They do not feel competition has brought adequate rate reductions under the stranded cost recovery legislation that was passed. Most congressional leaders support recovery of legitimate stranded cost arguments. Some congressional leaders who support the consumer are on the far left. Senator Paul Wellstone (D-MN) does not support stranded cost recovery of nuclear facilities, but Wellstone is in the minority.

### ***Economic Stability Issues With Nuclear Industry Transformation***

Stranded cost recovery will be important to the economic viability of the nuclear industry. The organizations of various nuclear holding utilities is changing greatly. Utilities are aligning themselves in mergers, divesting certain generating assets that are not economical, and generally deciding what niche of the industry they will be able

to flourish in and provide a good rate of return for stockholders. In the nuclear industry, a number of different formations are taking place. To date, one nuclear plant has been sold to AmerGen Energy. AmerGen Energy, set up by PECO (Philadelphia Electric Company), is looking for opportunities to buy nuclear generating facilities. A couple of important safety issues must be addressed when nuclear holding utilities set up a separate nuclear operating business or sell a nuclear license. The purchaser or operator must be able to prove they are stable enough financially to operate and decommission an acquired nuclear plant. Because these deals are very new, a number of legal matters concerning transfer of license must be defined more clearly. Buyers of nuclear facilities want assurance that stranded cost recovery is resolved before the purchase.

### Financial Qualifications

Assurance from policy makers, about nuclear-related stranded cost recovery, will allow more competitive nuclear industry transformations to take place. Under NRC regulation 10CFR50.33 the funding of a nuclear plant operation is addressed. In 10CFR50.33(f) a non-utility applicant is required to provide information demonstrating that there is reasonable financial assurance it can cover estimated operational costs to the end of the plant license. In doing this, the non-utility estimates total annual operating costs for five years and where they will attain these funds. A newly-formed company must provide the financial relationship the new company will have with its investors. It must also have the financial ability to meet any contractual obligations which have been incurred. These conditions will become significant when a company either buys a nuclear facility or if the nuclear plant becomes an independent operating non-utility. If stranded cost issues are not resolved, there is no incentive for another company to take nuclear related debt on. PECO currently is looking for nuclear plants where stranded cost issues are resolved, with some sort of legislation, prior to the purchase.

### Financial Decommissioning Assurance

Decommissioning is an issue to be dealt with in sales or transfer of a nuclear facility. Decommissioning stranded cost arguments must be resolved as soon as possible, to allow for nuclear transactions to take place safely. As described in the introduction, most states allow for some sort of non-bypassable transmission charge to allow the decommissioning fund for a plant to be paid in the rate base over the continued life of the plant, regardless of the new competitive market. Decommissioning funds are part of the NRC regulation 10CFR50.75(c). A non-utility must show it has adequate financial backing to support the decommissioning costs. A new entity applicant would need to provide the same financial security and savings plan. For states that put decommissioning costs as a stranded cost, such as New Hampshire, it will put incumbent utilities in a vulnerable economic position, due to the uncertainty of stranded cost recovery. If decommissioning funds fall into stranded cost categories, significant legal issues will ensue for those states. If a company decides an uneconomical nuclear

plant will be shut down, will decommissioning stranded cost be withheld in the case that pricing mechanisms are a function of plant operation. It will be important policy makers allow for recovery mechanisms to continue for nuclear decommissioning funds despite plant shut-down. An option that allows for continued decommissioning collection is *separating* decommissioning and plant operation costs. In New Hampshire, interim stranded cost (ISC) problems involving the type of stranded cost mechanism are at issue. It has been proposed to cover stranded decommissioning costs under a non-bypassable wires charge, but one partial owner of Seabrook does not have any distribution capacities, thus how would this owner collect the wires charge.<sup>xxxii</sup> PUCs, the NRC, and utilities will need to work on a compromise to allow for safe nuclear business transactions dealing with decommissioning assurance.

### ***State Versus Federal Legislation***

Most stranded cost issues are addressed at the state level. Each state has a variable degree of cost arguments. On the whole this issue has progressed to different stages in states that have adopted restructuring legislation. FERC supports stranded costs recovery: *"The Final Rule also permits public utilities and transmitting utilities to seek recovery of legitimate, prudent verifiable stranded costs associated with providing open access and Federal Power Act section 211 transmission services."*<sup>xxxii</sup> FERC only intervenes when states do not have jurisdiction to decide on stranded cost issues. The majority of congressional leaders are more concerned about fair interstate commerce and states that decide not to restructure their regulated systems.

### **Interstate Commerce**

As states move forward with restructuring, free interstate commerce is becoming one of the pressing issues currently. Some states have imposed transmission charges on electricity flowing into their state from a neighboring state. These transmission charges prevent consumers from buying competitively charged electricity. A bill was recently introduced by Senator Don Nickles (R-OK), S.2187, "Electric Consumer Choice Act," amending the Federal Power Act so that no state can pass legislation that discriminates against a consumer who wants to purchase electricity through interstate commerce. This will be an important issue congressional leaders will be dealing with if state-by-state restructuring initiatives are supported.<sup>xxxiii</sup>

### **Late State Entry**

Another long-term issue that concerns lawmakers is the timeline in which states enact restructuring legislation. The states that will benefit the least from restructuring will

tend to have the least motivation for adopting new legislation. It is important that all states eventually adopt competitive legislation. Low-cost states that fail to adopt competitive legislation risk suffering economically in the future. The utilities in these states may come out poorly when the state does decide to enter a competitive market. Further investments by utilities that work under regulatory groups could lead to poorly regulated market based business decisions, thus leading to more eventual stranded costs. If a state produces an overabundant supply of cheap power, they stand to benefit on the whole, because the utilities will sell more power. Cheap power also attracts industrial customers, thus benefiting the economical health of a state.<sup>xxxiv</sup>

## ***Taxation Challenges***

### ***Lost Tax Revenue***

Over the transition period, in which stranded costs are recovered, electricity prices are predicted to fall significantly. The savings to customers is estimated at \$20 billion.<sup>xxxv</sup> With this savings comes loss of federal, state and local taxes. Private IOUs have more of a contributing presence in this issue, because municipalities, and Federally Utilities generally do not pay as much taxes. Pricing mechanisms must be introduced to recover the lost tax revenue.

One of the significant differences between taxation in regulated compared to a competitive market is the variance in the tax revenue stream.<sup>xxxvi</sup> Under the regulated system tax revenue is very steady compared with a fluctuating free-market system. A pricing structure that dampens the oscillatory movements in the market must be obtained.

### ***Equal Taxation***

Many IOUs, which pay significantly more taxes, are requesting equal taxation policies. As the current utility industry has evolved under the regulated market, four previously mentioned utility types have taken hold. These four share different percentages of taxes collected. In a competitive environment, utility groups will be demanding equal taxation so that there is a level playing-field. Property taxes are an especially volatile political issue. Northern States Power recently presented their opposing view on property taxes:

*For its part, NSP wants to replace the property tax with a consumption tax that all energy users would pay, whether they got power from a co-op, municipal, or IOU owned utility. The money would go to the same local units of government that receive the property-tax revenues...*<sup>xxxvii</sup>

Consideration of risk allocation, taken on by local governments that accepted placement of large generating facilities in their communities, should also be accounted for when justifying local taxation of utilities. Areas where nuclear power plants are located could argue they accept more risk and so deserve the large tax base benefits.

## POLICY ALTERNATIVES

### ***Stranded Cost Recovery Alternatives***

The best way to identify policy alternatives is to examine recent legislative restructuring plans implemented in various states. Important issues addressed in state legislation include stranded cost recovery allocations, taxation modifications, and transition time to a fully competitive market. In general, most states are allowing for a majority of stranded cost arguments, with various pricing mechanisms, over a transition period of three to ten years until full retail competition is realized.<sup>xxxviii</sup>

Most policies proposed and adopted include set percentage discounts for residential customers, until the end of the transition period. Larger industrial consumers will see benefits proportional to their size, in the short-term.

These are several stranded cost mechanisms states are using, of which three will be analyzed. The first and second, *no stranded cost recovery* and *provisions for nuclear stranded costs - as long as they remain in service*, are the consumer and industrial backed policies. The third, *securitization*, represent the utilities recommendation. The policies of some of the main-stream stakeholders can then be addressed.

- ***no stranded cost recovery***
- non-bypassable charge, determined on case-by-case basis
- transition charge and ***securitization***
- ***provisions for nuclear stranded costs - as long as they remain in service***
- exit/entrant fees
- stranded cost recovery allowed as a function of how much is divested

## Securitization

Securitization is a long-term solution that locks in stranded costs for a utility and assures against debate in the future. It mitigates the stranded cost over a given transition period set by state legislation. It achieves the purpose of recovering stranded costs, but delays the effects of true competition until after the bonds are paid back. Divestiture of assets before securitizing stranded costs is the most economical, because the secured bond holders become involved with any further business activity. In this respect, securitization is not the most flexible policy alternative, but does protect utilities from prolonged litigation over stranded costs arguments. Divestiture is also a good way to determine the market value of assets up for stranded cost valuation. The state, i.e. taxpayers, assume some of the risk associated with securitization. The state is involved in guaranteeing a revenue stream to the utility through ratepayer agreements. Because the alternative is new, it is unclear what legal protection bondholders would have if the state decided to repeal or amend securitization legislation. California is currently addressing this issue, because the bill enacting some securitization is going to be on the ballot for amendments this fall. Another risk involves ratepayers. Because securitization locks in stranded cost, it may lock in an overestimation of market price, leaving the ratepayer with above-market rates. The policy is not flexible in this respect. The flexibility largely rests upon the method that is used to determine a "least-amount" of stranded costs at the onset of implementation. A low estimate is always better if no other mechanisms will adjust for the market. The benefits of securitization come in the spreading out of stranded costs and thus not burdening the ratepayers all at once. Securitization favors incumbent utilities so caution must be exercised with this policy alternative. Pennsylvania recently allowed approximately \$1.1 billion of a recommended \$3.8 billion in securitization requested by PECO. This instance shows that PUCs are likely to give a percentage of the argued stranded costs for fear of overestimation. These are several of the factors that must be weighed when deciding on securitization.

## No Stranded Cost Recovery

If an approach with no provisions for stranded cost allocations were taken, a number of different concerns will arise. This method is an immediate mitigation of stranded costs, where stockholders would absorb the loss. The risks of not allowing stranded cost involve bankruptcy, lost innovation initiatives (R&D cuts), investor confidence lost, and most likely legal battles by the utility would follow. This may seem like the most beneficial alternative with respect to inducing competition quickly. The benefits would be immediate realization of market-based prices, with the incumbent utilities at a disadvantage. When the risk of bankruptcy is taken into account, a number of reliability concerns arise. Even though immediate competition is realized, one must also look at the economic dishevel that may come as a result of a utility failing. If

continuous power reliability were sacrificed, we find ourselves in difficult times in this Information Era. The Citizens Utility Board (CUB) urged a \$200 million reimbursement by Commonwealth Edison, a utility in Illinois, for power reliability failure during the recent Midwest heat wave.<sup>xxxix</sup> If a 'no stranded cost recovery' approach is taken, careful considerations must be taken into account regarding how financially solvent a state's incumbent utilities may stay. A great disadvantage of allowing no stranded cost recovery involves the lengthy litigation that may ensue. Utilities that are denied reasonable stranded cost recovery opportunity are likely to cite the "...*Takings Clause thru Due Process Clause of the Fourteenth Amendment.*"<sup>xl</sup> of the U.S. Constitution.

### *Nuclear Stranded Cost Provisions*

This is a very specific policy alternative addressing the issue of nuclear stranded costs. Utilities that hold nuclear facilities, specifically non-IOU nuclear facilities, would benefit the most from this alternative through guaranteed recovery of nuclear-related stranded cost recovery. The policy allows recovery of nuclear related stranded costs if and only if the nuclear facility being mitigated is still in operation. The flexibility of this alternative is that the recovery mechanism can react to the changing nuclear landscape. Questions of a spent-fuel repository and actual operating costs of nuclear plants leave

an amount of uncertainty regarding which facilities will thrive and which will succumb to market forces. The taxpayers stand to benefit in respect to savings realized if a nuclear plant closes down. The stockholders assume the most risk with this proposal, in that stranded cost recovery is a function of a plant continuing to provide power.

### ***Property Tax Restructuring Alternatives***

Policy alternatives for taxes concern local and state governments more than the federal government. These are several property tax alternatives. Two policy alternatives, which may be the easiest to apply and would avoid major tax restructuring, will be assessed.

- ***replace property tax with tax based on energy consumption***
- ***tax all utility types the same***
- pass the tax to the ISOs which are still regulated
- offset lost tax revenues of local jurisdictions with state aid
- adapt to less tax revenue
- shift utility property taxes to non-utility property

### Consumption Tax In Place of Property Tax

A policy alternative, for resolution of property tax inequality between utility groups in a state, could be a consumption tax. This tax is included as a cost on all electricity sold, rather than an unequally distributed property taxes currently in place in many states. The social costs of this policy could be greater than some local communities, with large utility property tax base, could handle. Some communities derive school funds from these property taxes. One solution to this loss of local tax base is a redistribution of the consumption tax to the same local units of government, as Northern State Power has recommended in Minnesota. The benefit of this alternative is creating a more level playing-field. It is obvious that utility A, with \$200 million in taxes, and utility B , with no taxes, will have different economic constraints on them. A consumption tax would be one of the more feasible policy options to implement.

### Equal Property Taxation

If property taxes were administered equally between IOUs, munis, co-ops, and Federally owned utilities , the problem of unequal taxation would not exist. As plants are put on the market, the value may be much less than the appraised value. This would lead to less tax revenue due to devaluation of plant assets. Utility groups that pay little or no property taxes would see their production costs go up. <sup>xli</sup> Any time there is a tax structure issues to be resolved, lively debate is likely to ensue. Tax changes are inevitable in creating an equal opportunity in the new competitive market.

## **RECOMMENDATIONS**

In accessing the value of stranded costs and implementing legislation to mitigate these cost, policy makers must move to provide the most benefits for the greatest numbers. Undoubtedly there will be short-term winners and losers due to the many different factions involved and variation of electricity price from coast to coast. Some of the more important issues which must be resolved are nuclear-related stranded costs and long-term future fuel and power contracts, especially long-term coal contracts. Policy makers must be sensitive to the socioeconomic conditions that lead to many of the regulated-market business decisions which could become stranded. Economics of a regulated market are far different from the free-market forces. New technologies have brought changes to the utility market and lowered prices. Consumers will see modest rate reductions during a stranded cost recovery period, but stand to save significantly in the long-term. Residential consumers account for approximately a third of the electricity consumed in the U.S. , and thus should see a representative proportion of the competitive savings. Legal gridlock will only prolong the transfer to a competitive market so policy makers should work diligently on a compromise that both utilities and consumers can benefit from.

## ***Adaptive Stranded Cost Recovery Mechanisms***

The utility industry landscape is changing at a rapid pace. Legislation addressing stranded cost recovery should have mechanisms that can adjust for changes in stranded cost estimates. This is mainly a protection tool for consumers. If future fuel prices go below estimated values, the utility industry should not see all the profit due to stranded cost agreements that were provided to give the utilities "training wheels" while they divest and adjust for a new market. Plant operation should be a prerequisite for stranded cost recovery, except in the case of decommissioning funds in nuclear related generation. True-up mechanisms should be applied to adjust for changes in the market. Price caps should also be set in place to protect against sudden market changes. Stranded cost recovery through securitization is a viable option, but should not be used to fund 100% of stranded costs due to their legal rigidity and the difficulties in predicting long-term future market trends. A more complete examination of state stranded *benefits* will be important in the states that have not adopted competitive legislation yet. Stranded benefits can subtract up to 25% from current stranded costs.

Policy makers should also be wary of the mergers that may take place in the future. This is the direction the telecommunication industry is currently going, and where the computer software industry is already, even though it was not intended originally. Choice of power providers benefit the consumer, because competition drives prices down. Capitalism naturally reduces the number of competitors over time, and this is important for policy makers to consider when setting up stranded cost legislation for the new competitive utility market. Stranded cost policies should not be set up to put incumbent utilities in economically adverse conditions.

## ***Repeal of PURPA***

PURPA was proposed to advocate investment in renewable energy sources. For the sake of not incurring further contracts that could become strandable in a competitive market, we should urge policy makers to repeal PURPA.

## ***California Versus New Hampshire Approach***

For an example of the range in which policy makers are making their decisions, one can study the two extremes California and New Hampshire represent as restructured states. California was originally going to deny stranded cost recovery, but after they announced this position publicly, utility stocks lost 23% of their value, or the equivalent of \$5 billion in market value in aggregate.<sup>xlii</sup> This may have had a large impact on how regulators in the state rethought their position. In the end, the state supported \$20 billion in stranded cost recovery through securitization and transition charges, which is

consider generous by many economist and industry analyst. Recently, citizens successfully petitioned to amend the restructuring legislation passed. This state will set precedent on how to restructure in other states. New Hampshire is on the other end of the spectrum, allowing only partial recovery of stranded costs. Public Service Company of New Hampshire is challenging the New Hampshire Public Regulatory Commission on stranded cost allocation arguments. This state has been the loudest in protesting stranded cost recovery. The utilities argument for stranded cost involve unamortized nuclear sunk costs and future power contracts that exceed current market prices. These costs were fully accepted by the NHPRC, and were adjusted into the ratebase accordingly. The outcome of the court case, set to start in November, will also set precedent for stranded cost recovery. <sup>xliii</sup>

### ***Taxation Equality***

Taxation laws concerning property taxes will need to be reevaluated to provide a level playing field for all utility types. A fully competitive market can not be realized when certain utility groups have handicaps in property taxes. If we are to attain all the advantages of the competitive free market, privatization of munis, co-ops, and Federally owned utilities will need to be addressed. Until then, a consumption tax or an equal reevaluation of property taxes will need to be undertaken.

## **ACRONYMS**

PURPA: Public Utilities Regulatory Policies Act of 1978

PUCHA: Public Utility Holding Company Act of 1935

EPACT: Energy Policies Act of 1992

SEC: Securities and Exchange Commission

IOU: Investor Owned Utility

Co-Op: Cooperative Utility

Muni: Municipal or Publicly Owned Utility

PUC: Public Utility Commission

ISO: Independent Standard Operator

FPC: Federal Power Commission

FERC: Federal Electric Regulatory Commission

CWIP: Construction Work In Progress

AFUDC: Allowance Funds Used During Construction

OPEC: Organization of Petroleum Exporting Countries

QF: Qualifying Facility

EWG: Exempt Wholesale Generators

OASIS: Open Access Same-time Information System

NRC: Nuclear Regulatory Commission

DOE: Department of Energy  
ABS: Asset-backed Security  
ECA: Electric Consumer Alliance  
CSE: Citizens for a Sound Economy  
ISC: Interim Stranded Cost  
NHPRC: New Hampshire Public Regulatory Commission

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