# A Beginner's Guide to the Politics of Power

# Essential Concepts in the Restructuring of Electrical Utilities Made Understandable

by

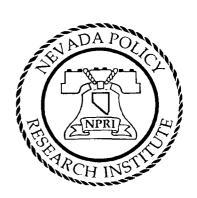
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# **Executive Summary**

The deregulation of electrical utilities is coming. Nevada's legislature is likely to address this issue in some fashion during the 1997 session, and return to it in the 1999 session. Many legislators voice concerns that Nevada will be left behind: several neighboring states, including California and Oregon, have already begun the deregulation process.

Electrical utilities are for the most part large, vertically-integrated producers who generate, transmit and distribute power to customers for a single, "bundled" price. Electricity producers also operate under a "regulatory compact" with state public utility commissions (PUCs). Under a regulatory compact, a utility agrees to serve all customers in its service area and limit its profit to a fixed rate of return. In return, the state PUC grants the utility a geographic monopoly to protect it from competition, and a guarantee that it will remain profitable as long as its decisions are approved by state regulators.

The most significant element of electricity deregulation is the idea of "wheeling." Wheeling, loosely defined, is the purchase of electricity from one utility, which is then transmitted (or "wheeled") to the buyer through the transmission and distribution systems owned by another utility. Wheeling is often used as a buzz word for retail competition, and a parallel can be drawn between wheeling power from a distant producer through the local utility and choosing a long-distance carrier independent from the local telephone company.

Industry analysts claim current regulatory policies, most importantly cost-based pricing models, have encouraged waste in the electricity industry—waste that customers are forced to pay for. Furthermore, critics claim that power buyers are trapped into supporting non-relevant political agendas, like so-called "green power" and rate subsidies for older consumers. Deregulation and free-market competition is thought to be the only realistic way to remove unwanted baggage from the existing system.

In order for wheeling to work, the three elements of electricity service must be separated, or "unbundled," into individual components. These components are: 1) Generation – the production of electricity, 2) Transmission – the moving of electricity from one place to another, and 3) Distribution – the dispersal of power to end users. Current proposals would remove many of the restrictions placed upon generation, although transmission and distribution functions would likely remain heavily regulated.

Another important issue is "stranded costs." These costs represent unfavorable power purchase contracts or outdated and inefficient equipment which would have to be written off or expensed down to market value under a competitive environment. These costs could theoretically make a utility uncompetitive and drive it out of business. Utilities want to be able to recover these costs in full because regulators originally approved them. Consumer groups feel that they represent bad choices, and customers should not get the bill. Many states considering deregulation, have decided to allow at least partial recovery of these costs.

Nevada is in good shape for the coming of electrical market competition, although there are differences between the north and the south of the state. The north will likely feel little adverse impact from competition, because Sierra Pacific Power Company has historically done a good job of controlling costs. Nevada Power Company in the south, however, has allowed cross-subsidy of consumer classes and has had difficulty reacting to growth in their service area, meaning that adjustments to competition there will be harsher. On the whole, the coming of competition to Nevada may require additional investment in transmission infrastructure before the full benefits of deregulation can be realized.

#### Introduction.

Few issues currently before our legislators have the potential to effect the lives of average Americans as profoundly as deregulation of electrical utilities. Its relative importance aside, a complex weave of technical details and labyrinthine regulatory structures make this a challenging issue to grasp. Keeping these complexities in mind, it's important to impart at least a basic, working understanding of electricity deregulation in order to further an intelligent public debate.

# Historical and legislative environment.

One must understand the evolution and present structure of the electrical utility industry before one can properly comprehend and evaluate the consequences of deregulation. Thomas Edison's first New York central power station (the first electric utility company in the world), began operation in September 1882.1 The electricity industry enjoyed rapid growth throughout the rest of the 19th century. During this early period, local governments usually granted nonexclusive franchises to individual electricity producers. There was very little formal regulation at the time because most officials believed that competition and the free market provided sufficient oversight. As the industry grew, however, many limitations in the system became apparent. Existing producers wanted more barriers to entry in order to ease the burdens of competition, and public officials were becoming increasingly concerned with franchise abuses and the reliability of service. These concerns resulted in the establishment of public utility commissions (PUCs), or public service commissions (PSCs), in 40 states by the early 1930s.<sup>2</sup>

# The regulatory compact.

Governmental desire for increased regulation and utility desire for increased safety from competitors eventually evolved into what is now called the "regulatory compact." The idea of the regulatory compact is simple: regulators from the state PUCs grant the security of an exclusive franchise to an electricity producer in a particular geographic area. In return, the utility agrees to serve all customers in its service area, surrender much of its autonomy to regulatory mandates, and limit its profits to PUC-determined "reasonable" rates of return.<sup>3</sup> This arrangement seemed to make perfect sense, given the common wisdom of the time that

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electrical utilities were a "natural monopoly": an industry where a single producer could provide better and more efficient service than several competitors with duplicate resources in a given area.<sup>4</sup>

From this point, state PUCs regulated most aspects of the industry, including what rates could be charged for the interstate sale of electricity. This soon changed. In 1927, the U.S. Supreme Court ruled, in *Public Utilities Commission v. Attelboro Steam and Electric Company (273 U.S. 83)*, that state regulation of interstate electricity rates created a burden on interstate commerce and would therefore be the sole domain of the federal government. The *Attelboro* ruling stated that only federal officials could regulate the interstate sale of electricity, yet the federal government had no regulatory mechanisms in place. Many considered this a substantial regulatory void.<sup>5</sup>

# Changes in 1935: the FPA and PUHCA.

In response to this regulatory gap, Congress enacted two pivotal pieces of legislation: the Federal Power Act of 1935 (FPA) and the Public Utility Holding Company Act of 1935 (PUHCA). The FPA created the Federal Power Commission (FPC) and granted it jurisdiction over both interstate transmission and wholesale selling of electricity. PUHCA cemented the idea of the regulatory compact and restricted utility service areas to certain geographic boundaries. PUHCA also required electrical utilities to divest themselves of unrelated subsidiaries, and prohibited holding companies and nonutility corporations from acquiring any wholesale or retail electric business apart from an integrated public utility system.

Under the combined auspices of state PUCs, FPA and PUHCA, the electrical utility industry experienced steady growth until the early 1970s. This growth period was marked by increased electrical production and declining prices as new technologies and economies of scale came increasingly into play. By the end of this period, the industry was characterized by large, vertically-integrated utilities.

#### The 1970s.

Significant change came to the electric industry in the 1970s. At the start of the decade, electricity prices began to rise for the first time.

This occurred for several reasons. First, inflation cut the demand for electricity, resulting in excess capacity. Second, OPEC's oil embargo greatly increased the price of petroleum—the primary fuel of many electricity generators. Third, increasing natural gas prices raised costs substantially on generators using that fuel. Fourth, increasing environmental concerns impacted prices in the form of new regulations that led to higher-than-anticipated production costs for renewable and "clean" energy. Furthermore, new standards required by the Nuclear Energy Regulatory Commission (NRC) in the wake of the highly-publicized Three Mile Island incident resulted in substantial cost overruns and delays for utilities owning nuclear generating facilities.<sup>8</sup>

Taken together, these factors drove power prices through the roof. By 1985, average nominal residential electricity rates more than tripled. In some cases, industrial rates more than quadrupled. Industrial customers in particular began to look for alternatives to relying on public utilities for their power, prompting some to consider bypassing utilities through self-generation.<sup>9</sup>

Finding these increasing prices difficult to deal with, state PUCs began instituting so-called "demand side management" (DSM) programs, ostensibly designed to encourage energy conservation and efficiency. States also began the implementation of "integrated resource planning" (IRP) programs, designed to coordinate DSM and supply-side decision making with environmental projects and new renewable energy requirements. Critics often charged that DSM and IRP programs were simply more inefficient and thinly-disguised bureaucratic attempts to use governmental regulation to promote radical liberal and environmentalist agendas.

# Public Utilities Regulatory Policies Act.

In 1978, the continuing energy crisis prompted Congress to pass the Public Utility Regulatory Policies Act (PURPA). PURPA was designed to reduce the nation's dependence on foreign oil—as well as avoid a repeat of the 1976-77 natural gas shortage—by encouraging conservation and the use of renewable energy sources. PURPA created a new category of electric business called a qualifying facility (QF). QFs were often independent, unregulated companies. They were allowed to

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produce electricity and sell it to electrical utilities at "avoided cost," or the cost that utility would have had to pay to either generate that electricity itself or buy it from another source. Certified QFs were exempt from PUHCA restrictions on geographical service areas and ownership, except in the case of a restriction limiting a utility's ownership of a QF to less than 50 percent. By 1988, the Federal Energy Regulatory Commission (FERC, which had succeeded the FPC in 1977) had approved roughly 62,000 megawatts of QF capacity. It

By the time PURPA was enacted, cost disallowances and experience with regulatory agencies and the energy crisis had left most traditional utilities reluctant to invest in new primary generating facilities, also known as "base-load" plants. Instead, utilities sometimes found it advantageous to enter into partnerships with one another to construct QFs. This allowed them access to cheaper generation facilities outside the umbrella of regulation in order to either increase profits or subsidize reduced rates on older, more costly generating equipment. Currently, neither Nevada Power Company in southern Nevada, or Sierra Pacific Power Company in northern Nevada have any ownership interest in QF facilities.

To offset high demand, utilities also built "peaking units," or smaller generation facilities designed to handle temporary increases in demand. These smaller generators also had the attractive feature of being cheaper to build, and they also took far less time to construct, reducing the lead times until the units could be placed into service.

Hesitation on the part of utilities to invest in new, large-scale generators also led to new opportunities: independent power producers (IPPs) and nonutility generators (NUGs). IPPs are companies that build their own plants outside the traditional utility structure and then sell the electricity they generate to utilities at wholesale. NUGs are usually large companies with self-generation capacity that sell their excess electricity production to utilities. In general, the legal distinction between IPPs and NUGs is dependent on size. Some estimates claim that IPPs and NUGs, along with QFs, are responsible for approximately half of the nation's generating capacity built since 1989.<sup>12</sup>

## Another look at deregulation.

By the early 1990s, many lawmakers and industry professionals began to wonder if there was a more efficient way of regulating electricity. The federal government's experiments with deregulating other industries—especially airlines, railroads, motor carriers and the telecommunications and natural gas industries—generally resulted in savings to consumers. According to one estimate, the nation has realized aggregate savings of \$36-46 billion (in 1990 dollars) annually from deregulation. (That is equivalent to a seven to nine percent increase in the component of the Gross National Product affected by regulation. <sup>13</sup>) These results prompted officials to experiment with deregulating electrical utilities as well.

# Energy Policy Act of 1992 (EPAct).

After numerous hearings and subcommittee recommendations, proponents of a more free-market approach to public utilities succeeded in having many of their ideas incorporated into the new national energy strategy specified in the Energy Policy Act of 1992 (EPAct). EPAct mandated that steps would be taken to move electricity producers toward a competitive market system, with FERC in charge of implementation. A major part of EPAct granted provisional exemptions from PUHCA to companies that specialized in generating power for wholesale transactions. These companies, known in EPAct as "exempt wholesale generators," were also exempted from most of PURPA's cogeneration and renewable energy requirements.<sup>14</sup>

EPAct was remarkable in that it authorized the creation of new generating entities separate from the dominant, traditional, vertically-integrated utility model.<sup>15</sup> It also left the door open to retail "wheeling" among utilities. Wheeling, loosely defined, refers to the purchase of electricity from one utility, which is then transmitted to the end-user over lines belonging to another utility. (Wheeling is an important concept to electricity deregulation and will be explained in greater depth later.)

Wholesale wheeling, or wheeling among wholesale electricity producers and utilities, was already practiced, and had spawned an entire sub-industry of wholesale power marketers and brokers. Marketers are, in a sense, electricity speculators: they buy power from generators and

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then resell it to utilities for a profit. Brokers, on the other hand, act more as facilitators than middlemen. They don't actually take title to power, but rather match buyers and sellers for a fee or commission.<sup>16</sup>

Despite the new law, effective competition in the wholesale market requires access to the nationwide transmission grid which is still owned, in great part, by vertically-integrated utilities who are for the most part skeptical—if not outright opposed—to the idea of a competitive marketplace. With this in mind, EPAct also authorized FERC to order transmission-owning utilities to open their lines to anyone interested in wholesale wheeling.<sup>17</sup> In effect, EPAct greatly expands FERC's control over wholesale wheeling transactions.

## With whom does the actual authority reside?

Even though Congress made it clear through EPAct that competition is eventually coming to the electricity industry, consideration of state sovereignty was carefully maintained. EPAct is interpreted by most to prohibit FERC from ordering retail wheeling to the extent that it would impact state laws granting utilities exclusive franchise areas. EPAct states "Nothing in this subsection shall affect any authority of any state or local government under state law concerning the transmission of electric energy directly to an ultimate consumer." Some analysts, on the other hand, contend that EPAct does indeed grant FERC the authority to require retail wheeling if regulators would only change they way they view the concept of the "end-user." As a result, certain regulatory questions remain to be answered, most likely in the courts, and the next major steps toward deregulation are likely to be taken at the state level.

# Encouraging waste: the case for deregulation.

The philosophy behind deregulation is that the "invisible hand" of the free market is vastly more efficient in establishing price and production than central planning by even the best-intentioned regulatory body. In fact, critics charge that it is often regulatory structures themselves that have caused many of the electricity industry's current problems.

For instance, many experts believe cost-based pricing policies encourage over-staffing, gold-plated investments, production of excess capacity and suppression of innovation. In essence, if an electric utility

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wants to raise its rates, all it must do is convince regulators—who may not even be knowledgeable industry professionals—that it needs to build a costly new plant, negotiate an unfavorable electricity purchase agreement or make expensive capital improvements. One industry analyst noted, "The electricity industry is one of the only ones in this country where you can give yourself a raise by redecorating your office." In response to this criticism, utility representatives maintain that so-called "gold-plated" investments are often rational responses to economic uncertainty, and a reflection of the fact that their obligation to provide reliable service to their customers sometimes precludes the selection of the cheapest possible alternatives.

Furthermore, a utility is allowed to pass the bill for most regulator-approved costs on to consumers. Since it is guaranteed a PSC-allocated rate of return, irrespective of how efficiently the job is done, critics argue that a utility has no incentive to do things the best way, only the easiest way—whether it is substantially more expensive in the long run or not. This situation could not exist in a free market, where competition and the laws of supply and demand force firms to out-position their competitors by efficient production, product innovation and enhanced levels of service.

# Playing politics with power.

Another problem many find with the current industry is the way that social-engineering goals of certain elitist bureaucrats have worked themselves into the very fabric of regulatory policies. A good example of this is cross-subsidy of consumer classes that sometimes occurs. Large industrial consumers, such as manufacturing plants, mines and casinos, are in fact much cheaper for a utility to serve than their smaller business or residential counterparts. This is in part because there are fewer facilities involved, and these facilities have a constant load demand that makes predicting and supplying their power requirements much simpler. In addition, the physical characteristics of electricity make serving large, constant-use customers more efficient. With this in mind, common sense dictates that large users, who are cheaper to serve, should receive lower rates.

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In practice, this isn't entirely true. Regulators in many states (and closer to home in Clark County) have determined that residential users merit artificial rate subsidies. As a result, large industrial customers may be charged artificially high rates in order to cross-subsidize the artificially low rates enjoyed by residential consumers.<sup>20</sup> The most likely explanation for this phenomenon is the fact that residential customers vote, while businesses and corporations do not. This sort of politicized inequity would probably not exist if the electricity industry was competitive.

# Rhetoric becomes policy.

Another good example of the influence of political agendas in electricity regulatory policy is the use of renewable or "green" power. State and federal legislation increasingly places requirements on utilities to use certain percentages of so-called "Earth-friendly" power, such as hydroelectric, geothermal, solar or wind. While these requirements placate environmental agitators, they generally result in emotional and highly political rules, often based on little or no unbiased research, which result in higher prices for all consumers—with little or no improvement in the environment. For example: hydroelectric power is a good idea in Oregon and solar power may one day be a good idea in parts of the Nevada desert, but it would not make sense for Pennsylvania regulators to require either method in their state, where coal is abundant. Even so, Pennsylvania utilities may find themselves wasting money on their own alternative energy projects because of "enlightened" state regulatory requirements, despite the fact that modern, clean-burning coal-fired plants (which, incidentally, are mandated by other regulations) have a minimal adverse impact on the environment. Removing command-and-control policies from the industry will encourage companies to innovate and use the particular strengths of the natural environment in any given area to their best advantage.

#### The writing on the wall.

It is clear that the current industry structure is flawed, and several decades of relying on bureaucratic micromanagement has not solved the industry's problems. The federal government is opening up the field to competition as a last resort, and the question is no longer "Should we

deregulate?" but rather "Deregulation is coming, like it or not, and what is the best way to prepare for it?"

# Issues affecting deregulation.

As with any major shift in public policy, electricity deregulation carries with it several factors that must be taken into account as plans are made for change. How well these factors are addressed may very well make the difference between successful deregulation or merely moving from one undesirable situation to another.

# Unbundling.

One of the most basic issues regarding electricity deregulation is "unbundling." There are three generally-accepted components contained in electrical utility service: generation, transmission and distribution. Simply put, generation is the production of power, transmission is getting the power from one place to another, and distribution is delivering the power to end-users. Many analysts also acknowledge a fourth cost component: aggregation. Aggregation is a more nebulous concept relating to the manner in which a utility brings together, or "aggregates," power from different sources. Having mentioned it for the sake of completeness, aggregation will not be discussed further as it is not critical to a basic discussion of deregulation. Under current regulation, monopoly electricity providers supply customers with all components of service, "bundled" together for a single fee.<sup>21</sup>

Current deregulation proposals open up generation to competition, while maintaining regulatory control over transmission and distribution. This is thought to be the only effective means of preventing transmission-owning utilities from protecting their monopoly status by charging other producers unreasonably high rates to move power over existing lines.<sup>22</sup> This, coupled with the fact that wheeling customers could purchase their power (generation component) from a source or sources other than their local utility (which would still provide the transmission and distribution components), requires the separation, or "unbundling," of the three costs. How to separate and allocate these cost components is a critical issue.

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#### Stranded costs.

Also important is the problem of what to do with "stranded costs." Stranded costs represent obsolete equipment or bad investments which need to be adjusted downward to market value as a utility becomes competitive. Such adjustments could have potentially disastrous results on the profitability or bond rating of a utility.<sup>23</sup> Critics of the current system say that stranded costs are, in essence, a measure of the bureaucratic waste of cost-based pricing models and guaranteed rates of return.

The key question concerning stranded costs is what to do with them. Utilities want to recover these costs in full by passing them on to consumers, because regulators originally approved each purchase, contract or investment. Furthermore, a utility may not have incurred many of their stranded costs in the first place, without FERC and PUC requirements that they do so. Consumer groups and industry critics, however, say that many of these stranded costs resulted from irresponsible decisions to begin with, whether approved or not, and as such should not be the responsibility of the customer. Due to the detrimental effect of stranded costs on the health of a newly-competitive utility—especially those owning nuclear power plants or other high-cost assets—at least some partial recovery of stranded costs is likely to be allowed.

California, which has already begun the deregulation process, provides an example of a full stranded cost recovery plan. California utilities will have the ability to charge a one-time, non-bypassable "competition transaction charge" (CTC), a type of "exit fee," on those companies that decide to leave the current utility and wheel for their power elsewhere.<sup>24</sup> This doesn't satisfy wheeling customers, but it represents the type of compromise likely to take place during the transition toward a more competitive electricity market.

## Cost shifts.

As mentioned earlier, some regulators fear that deregulation will spell the end of cross-subsides among consumer classes. They claim that as large companies find themselves free to wheel and leave their local systems, residential users who are less likely to take advantage of

their new rights will see their bills skyrocket, as the utility tries to make up the difference.

While this may happen to some extent, this alarmist argument is flawed in several ways. First, the fear of a wholesale abandonment of the local utility by large customers is unfounded. During the early period following deregulation, many companies may decide to stay with their current provider because of the guaranteed service. When the retail wheeling market calms down—and there is better practical information available about the risks of wheeling—companies will be in a better position to make intelligent power provider choices.

Also, those few large customers who are most likely to bypass the local utility have, for the most part, already made other arrangements. A good example of this is the Mirage Resort in Las Vegas, where owner Steve Wynn used the threat of bypassing Nevada Power through self-generation to bring Nevada Power negotiators to the table to discuss a more favorable electricity purchase contract.<sup>25</sup> Although the resulting contract was ultimately denied by the PSC for legal reasons, a decrease in the price of natural gas allowed Nevada Power to give Wynn lower rates anyway, satisfactorily resolving the situation. Nevada Power has since approached the PSC about allowing it to negotiate special, long-term contracts with large customers in the future. This ability would provide the company with critical insulation against predatory competitors as the retail electricity market opens.

A point of fact on cost shifts, as well, is that no one is unfairly raising rates. Electricity rates would simply rise to an equitable market level without the artificial price controls that some customers are accustomed to. In the long run, even these customers will likely see their rates fall, as they learn to take advantage of wheeling, and competition drives the high-cost producers and distributors out of business in favor of more efficient competitors.

Given the political sensitivity of this issue, many state legislatures are likely to resort to interim price caps or "phase-in" incremental price increases in order to dull the shock of increased prices on small users during the transition period.<sup>26</sup>

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#### Customer information.

Another issue skeptics of deregulation stress is that how well the free market works will depend on how well people decide to look out for their own interests. They claim, perhaps with some validity, that many people may not wheel because they won't know how to—leaving them trapped, in effect, in the grip of a monopoly utility free to raise prices as large customers abandon their service.

Supporters of deregulation say this is not a reason to stall deregulation plans, but rather a call to make sure that state PUCs do their part to supply all customers, especially small users, with the knowledge to take full advantage of the new system themselves. They also claim that no customers can ever really be "stuck," because a more efficient competitor would eventually see servicing these customers as an opportunity, and would do what was necessary to inform them of their ability to bypass their local utility.

# Regulatory authority.

Even in a deregulated industry, there is still a role for regulators, but what exactly will that role be? Each state, with guidance from the federal government, will decide what part regulators and regulatory authorities will play. In many cases, regulation on generators will be reduced. Distribution-owning utilities, however, are likely to remain tightly regulated to ensure a competitive marketplace. PUCs are also likely to shift, at least in the case of electricity generators, away from the traditional regulatory model and possibly toward a more "hands off" approach—making sure that certain standards and qualifications are met, but without the element of micromanagement.

#### Infrastructure.

In order for retail wheeling to work properly, there must be a sufficient transmission infrastructure in place to allow the flow of power from generators to consumers. This infrastructure is in the form of cables and power lines, both above and below the ground, which form the nationwide power grid.

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The transmission infrastructure of America's utilities varies widely from the East to the West. In the Eastern states, where populations are much denser and areas of coverage are smaller, there is an extensive network of crisscrossed cables allowing ample room for power to flow freely. This also gives the benefit of redundancy. If a cable fails in New Jersey, for example, it is fairly easy to reroute the power to affected homes and businesses through an operational transmission line.

In the Western states, however, this is often not the case. The large distances between population centers and the relatively high cost of building transmission lines means the Western electrical infrastructure could require improvements in many areas before retail wheeling will exhibit its full benefits. A single fallen tree in the right place in Idaho could, conceivably, knock out power to vast areas of the West (a scenario which has actually happened).

In the Reno area, for example, there are only two major transmission lines, although another is planned to bring power from Alturas (providing that substantial barriers and delays encountered by project can be overcome). Without sufficient transmission capacity, implementation of retail wheeling in Northern Nevada would be limited by the laws of physics—only so much current can be forced through any given cable.

Another interesting side note is that there is no transmission line in the state directly connecting Reno and Las Vegas. Any flow of power between the two cities would have to be routed through another state with north/south lines, like California. Even if the Alturas line is approved, wheeling power between Northern and Southern Nevada could pose problems if our neighbors find their own electrical infrastructures taxed by the newly competitive market.

# Is Nevada ready?

One of the largest issues in the 1997 legislative session will be whether or not Nevada is ready for competition in its power markets. Despite any anxiety Nevada legislators and utility commissioners may feel, Nevada is, in many ways, in an enviable position with regard to restructuring its electrical industry. In fact, a report titled *The Structure of Nevada's Electric Industry: Promoting the Public Interest*, prepared

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by the Public Service Commission of Nevada, is generally optimistic and favorable on the subject of how well restructuring would work in the state.

Nevada has several things working its favor. Sierra Pacific Power in the North, for instance, is already providing residential customers power at close to the cost of service, meaning that major rate increases are unlikely as the shift is made to deregulation. Also, Sierra Pacific has relatively low stranded costs, removing the oppressive issue of how to deal with them.

Nevada Power in the south of the state, however, might have a harder time adjusting. Stranded costs are a slightly larger problem there. Also, a cross-subsidy of Nevada Power customer classes has kept residential electricity rates artificially low and a consumer outcry is likely to take place as a market adjustment occurs. Critics charge that much of this situation is due to a poor regulatory reaction to fast growth in the community. Even so, some fairly novel solutions to these problems, such as John Wellinghoff's proposed Las Vegas area urban electrical cooperative,<sup>27</sup> are likely to help deal with restructuring issues as they arise.

As mentioned earlier, the lack of adequate transmission facilities will likely be an issue for the whole state, but when compared to states like California, with huge bureaucracies and many stranded costs to expense, Nevada finds itself in a fairly good position.

#### Conclusion and Recommendations.

The writing is on the wall: Deregulation of our electrical utilities is coming. The question now is how to prepare. Will the legislature move toward the future while there is still time to make careful progress, or will it waste time longing for the "good ol' days" and then be pressed into hasty decisions at the last moment? The 1999 legislative session will likely decide.

As long as Nevadans understand the industry—where it comes from, and the failures in policy which have shaped its current state—and they proceed with thoughtfulness and deliberation, electricity deregulation can ultimately be a winning proposition for the whole state. It is

important, though, that Nevada lawmakers base their decisions on the unique conditions present in Nevada. In the months ahead, Nevada will have ample opportunities to learn from its neighbors' mistakes. Nevada legislators must resist the urge to be pulled into hasty action out of fear that California or another neighbor might do something first.



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- <sup>1</sup> Paul L. Joskow and Richard Schmalensee, <u>Markets for Power: An Analysis of Electrical Utility Deregulation</u>. The MIT Press, Cambridge, MA, 1983: p. 4.
- <sup>2</sup> The American Legislative Exchange Council (ALEC), "The State Factor: Electric Industry Restructuring: History and Background, November 1996." Volume 22, Number 8: p. 1.
- <sup>3</sup> Joskow and Schmalensee: pp. 13-14.
- <sup>4</sup> Nina W. Cornell and Douglas W. Webbink, "Public Utility Rate-of-Return Regulation: Can It Ever Protect Customers?" <u>Unnatural Monopolies: The Case for Deregulating Public Utilities</u>. Robert W. Poole, Jr., Ed., D.C. Heath and Company, Lexington, MA, 1985. p. 28.
- <sup>5</sup> ALEC: p. 2.
- <sup>6</sup> Joskow and Schmalensee: p. 14.
- <sup>7</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": p. 5.
- <sup>8</sup> Kenneth Nowotny, "Expectations and Ideology Define Electric Utilities." <u>Electric Utilities Moving into the 21<sup>st</sup> Century</u>. Enholm and Malko, Ed., Public Utility Reports, Inc., Arlington, VA, 1994: p. 25.
- <sup>9</sup> Federal Energy Regulatory Commission Notice of Proposed Rulemaking and Supplemental Notice of Proposed Rulemaking, Docket No. RM95-8-000, "Promoting Wholesale Competition Through Open Access Nondiscriminatory Transmission Services by Public Utilities," May 29, 1995: p.32.
- <sup>10</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": pp. 12-13.
- <sup>11</sup> The National Regulatory Research Institute (May) 1994, p. 28. This number does not include contracts executed and complied with.
- <sup>12</sup> ALEC: p. 3.
- 13 Ibid.
- <sup>14</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": pp. 13-14.
- <sup>15</sup> Legislative Counsel Bureau (LCB), "Competition in the Generation, Sale and Transmission of Electric Energy." Bulletin No. 97-11, January 1997: p. 8.
- <sup>16</sup> ALEC: p. 3.
- <sup>17</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": pp. 14-15.
- <sup>18</sup> A remark related by John Dobra, Ph.D., during a conversation in the Political Science Department at the University of Nevada, Reno, January 1996.
- <sup>19</sup> Another remark related by John Dobra, Ph.D., during a conversation in the Political Science Department at the University of Nevada, Reno, January 1996.
- <sup>20</sup> This statement, however, can be misleading. Even under a cross-subsidy scenario, industrial customers actually pay less than do residential customers per kilowatt hour purchased although that cost is still artificially high compared to what the market would have determined aside from governmental interference.

<sup>&</sup>lt;sup>21</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": p. 4.

<sup>&</sup>lt;sup>22</sup> Public Service Commission of Nevada, "A Report by the Public Service Commission of Nevada. The Structure of Nevada's Electric Industry: Promoting the Public Interest. Executive Summary: Presented to the ACR 49 Legislative Subcommittee": p. 5.

<sup>&</sup>lt;sup>23</sup> LCB: p. 18.

<sup>&</sup>lt;sup>24</sup> ALEC: p. 10.

<sup>&</sup>lt;sup>25</sup> Public Service Commission of Nevada, "Primer on Electric Industry Restructuring Prepared for the ACR 49 Legislative Committee by the Public Service Commission of Nevada": p. 16.

<sup>&</sup>lt;sup>26</sup> LCB: p. 54.

<sup>&</sup>lt;sup>27</sup> Jill K. Cliburn, "Gambling on a Co-Op." *Rural Electrification Magazine*. Volume 54, Number 3, December 1995: pp. 16-19.