A STAFF REPORT TO THE LEGISLATIVE ELECTRIC ENERGY TASK FORCE ON ISSUES RELATING TO BULK POWER, DISTRIBUTION, PRICING AND UNIVERSAL SERVICE

Prepared by the Offices of
House Research and
Senate Counsel and Research

GENERAL BACKGROUND

Under current state law, electric services are provided to retail customers by utilities which have geographic monopolies on the provision of electric service within their service territories. Customers within a utility's service territory must purchase all of their electric services from that utility and that utility is required to serve all customers within that geographic area. Investor-owned utilities are regulated by the Public Utilities Commission (PUC). For the most part, municipal and cooperative utilities are not regulated by the PUC but rather are subject to review by the relevant municipal authority and the members of the cooperative, respectively.

There is presently a debate as to whether the existing regulatory structure should be kept in place or whether the legislature should restructure or deregulate the electric industry in order to allow retail customers to shop for the electricity supplier of their choice. Under such a scenario, distribution and transmission services would continue to be regulated and provided by the incumbent utility. This public policy debate presents many complex issues, some of which are discussed in more detail below.

Return to top

LAWS 1998, CHAPTER 380

Laws 1998, chapter 380 requires the Legislative Electric Energy Task Force (LEETF) to convene technical advisory work groups to assist the legislature in analyzing specific issues relating to electric restructuring, described in section 2 of chapter 380. During the 1998 legislative interim, the LEETF was directed to convene work groups on at least the following issues: (1) bulk power system reliability, infrastructure and regulation; (2) distribution reliability, safety, and maintenance; (3) energy prices and price protection mechanisms; and (4) universal service issues.

The LEETF did convene the technical advisory work groups. Invitations were sent to parties who had participated in earlier task force work and approximately 35 organizations and individuals elected to participate.

Laws 1998, chapter 380, section 4, requires the staff of the LEETF to prepare and provide

reports on the activities and findings of the technical advisory work groups to the LEETF.

Return to top

ACTIVITIES OF THE LEETF WORK GROUPS

The bulk power and distribution issues were combined for analysis as were the universal service and price issues. Written comments on the bulk power and distribution issues were due July 15, 1998. Comments were received from 18 work group members. After staff review of those comments, individual meetings were held during July and August between task force staff and commenters. A full LEETF meeting on September 24, 1998 heard a report from staff on the first set of issues and a preliminary written report was submitted.

Written comments on the second set of issues related to universal service and price were due on September 15, 1998. Comments were received from 15 work group members. Instead of individual meetings, however, a group meeting of task force staff and advisory group members was held October 30, 1998 to review those comments and discuss unresolved issues relating to bulk power and distribution. Approximately 25 advisory group members attended that meeting.

Return to top

ISSUES AND FINDINGS

There are nine categories of issues related to electric industry restructuring that chapter 380 directs the LEETF to analyze. It has become apparent that those issues are highly interrelated and dependent. Thus, an analysis of a subset of issues related to restructuring is not particularly helpful unless some discussion of other related issues is included. Restructuring involves a series of complex issues and an individual's or organization's position on restructuring often depends on the resolution of the entire series of issues and not just how a particular subset of issues is resolved.

Paying heed to the admonition that there are other significant issues that impact the discussion of the four sets of issues on which comments have been received to date, the following summarizes the major issues raised and findings derived from the activities to date of the advisory work groups.

A. Restructuring Generally

There is no consensus among work group members as to whether Minnesota should move forward with restructuring of the electric industry to allow retail competition. Some favor retail competition, some favor it only if certain conditions are met, and others are opposed to it. There is consensus, however, that the investigation of issues relating to electric restructuring, as required by chapter 380, is worthwhile to assist the legislature in determining whether the state should restructure and to prepare the state for restructuring in the event that the legislature decides to restructure or restructuring is mandated by federal law.

B. Bulk Power Reliability

This section summarizes the significant issues raised in the written comments and in staff meetings with commenters to the questions relating to bulk power and reliability posed to the technical advisory work group members. A brief background discussion is included to provide context for the issues. This section is not intended as an exhaustive list of the issues raised by the questions and it is almost certain that other issues related to those questions will have to be discussed as the process continues.

1. Background

There is no precise definition of what constitutes the bulk power system. It is generally understood to mean: systems and facilities used to operate the regional transmission grid which transports electricity to general geographic areas for further distribution through local distribution systems to end users. Most would also include generation necessary for maintaining reliability as part of the bulk power system.

There is an interdependence to the bulk power system that is regional in nature, for example, an outage in Nebraska may cause generation or transmission action to be taken in Minnesota such as bringing a plant on line. The lack of a precise definition of the bulk power system did not appear to create a problem with respect to the questions posed to commenters about bulk power system reliability. Transmission-related issues were the focus of the comments.

The Federal Energy Regulatory Commission (FERC) has jurisdiction over transmission in interstate commerce including the issues of access to and prices for transmission. FERC adopted, in 1996, its Order Number 888. Order 888 establishes a policy of open and equal access to transmission capacity. This policy is critical for wholesale competition. There is general agreement that all the prerequisites for full and fair wholesale competition, such as adequate information systems and independent operation of the transmission system, do not exist but there is considerable disagreement about whether retail competition should be put off until all those prerequisites are in place.

The United States is divided into electric reliability regions. Minnesota is located in the Mid-America Power Pool (MAPP). MAPP not only describes a region but also a voluntary operating entity, one of the goals of which is to ensure the reliability of the electricity supply within MAPP. The various reliability regions and their national organization (NERC) are undergoing a reorganization. There is a possibility that Congress will enact a law changing the structure of the reliability organizations and their power and duties. Part of the reason for this change would be the introduction of retail competition for electric power supply.

2. Bulk Power Questions

Pursuant to Laws 1998, chapter 380, the following questions were asked commenters:

> (1) When will the bulk power system be capable of reliably supporting the volume of power transactions that would result from implementation of retail competition?
>
> (2) What modifications to the bulk power system and its management are necessary to ensure that retail competition in the state's electric industry does not diminish the reliability of the electric service, and what is the estimated cost of those modifications?
>
> These questions are interrelated and the answer to one is somewhat dependent on the answer to the other. The questions were intended to provoke a broad discussion and did so. A number of issues were raised about which there was some disagreement. Those issues and the agreements and disagreements are discussed below, issue by issue.

a. Adequacy of Bulk Power System to Support Retail Competition

There is agreement that the existing bulk power system could support retail competition in the sense that there would be no immediate change in load with retail competition and the same amount of electricity would be required. However, there is disagreement about what the advent of retail/whole competition will do to system reliability. There is also disagreement on what bulk system infrastructure changes need to be made to handle competition and the expense of those changes. (It is clear that some of the bulk system changes necessary to have full and fair wholesale competition such as information systems and independent system operation will also assist retail competition). Those concerned about bulk system reliability point out that the bulk power system was designed to support a system where power was generated to serve a native load and not a competitive wholesale or retail environment. These commenters cite reliability problems with increased wholesale competition and argue they are a harbinger of problems that would arise under retail competition. Others say that retail competition would not exacerbate the problems, such as transmission owners favoring their own load and inadequate information, affecting wholesale competition.

b. Transmission Constraints

It is generally accepted that the current bulk power system has a number of transmission constraints that limit the amount of electricity that can be transferred in, out, and through the MAPP region. Full and fair access to wholesale power, which is a prerequisite for a fully functioning retail market, will not exist unless those constraints are removed. If electricity cannot flow freely to where there is demand the issue of market power of native generators is raised. There was a comment that removing or addressing constraints could require extremely expensive upgrades of other lines simply because of the physical laws governing the flow of electricity. There was general agreement that removing these constraints required a regional solution that crosses state boundaries.

c. Regionalism-ceding of State Power

State law governs many issues related to the bulk power system (there is some speculation that FERC or Congress, or both, may in the near future preempt some of this current state authority). For example, issuing certificates of need for power plants and high voltage transmission lines, as well as the siting of those plants and lines have historically been governed by state law. However, the question of need is often regional in nature because the bulk power system is regional. The introduction of wholesale and/or retail competition and the concomitant elimination of electric service territories will accelerate the regional focus of the electric industry. For example, it may be most efficient and economical to run a transmission line through Minnesota, not to serve Minnesota but to allow cheaper North Dakota power to reach Milwaukee and Chicago markets. Regional needs have not been a traditional criterion in deciding the need for bulk electric industry infrastructure in Minnesota and there is little history of regional coordination of electric industry policy at the state government level.

d. Independent Operation of Transmission System

There is consensus that retail competition requires that the transmission system used to carry the electricity of many competitors be operated in an independent manner so that competitors have full and fair access to the system. There is disagreement about how to achieve this independent operation. MAPP presented a proposal for an independent system operator that was submitted to its members in September but the proposal was not approved by the members.

Northern States Power (NSP) has proposed the alternative of an independent for-

profit independent transmission company to operate the system. This is a tremendously important issue.

e. Cooperation in a Competitive Market

The current MAPP system is a voluntary system that relies on cooperation among the utility industry to maintain reliability. Several commenters expressed concern that in a competitive marketplace cooperation would be more difficult to achieve. Some felt that an adequate enforcement mechanism could not be found to replace the former voluntary cooperation and may jeopardize reliability because information and action necessary for reliability will not be shared or performed. Others felt that an independent system operator or independent transmission company would be an adequate replacement for the former voluntary, cooperative system.

f. Transaction And Information Systems

Commenters agree that competition would require more sophisticated information and transaction systems to maintain system reliability. A few commenters stated that the costs of the systems to keep track of transactions would, by itself, swallow up any projected savings from retail competition. Some commenters felt that the benefits of competition would be greater than the costs. Most commenters felt that the need for improved information systems, among other things, required a phase-in period for retail competition.

g. Metering

Just as with transaction costs, a few commenters argued that full retail competition would require an expensive investment in meters for virtually all customers. Others felt that the metering costs were overstated or that other methods could be used to obtain the information supplied by the expensive meters. The need for the information on customer usage would be to track electric usage so that system reliability could be maintained.

h. Phase in

In response to the bulk power questions, some commenters argued that the legislature should simply set a date for authorizing retail competition and then leave it to the market to evolve. Others felt that a transition period to adopt the necessary rules and mechanisms was necessary. At the October 30th meeting, there seemed to be consensus that the state should adopt the latter approach to authorizing competition rather than simply setting a date for the start of retail competition.

i. Transmission And Generation Shortfalls

As mentioned earlier, there is a consensus that the transmission system needs upgrading whether or not there is retail competition. The current excess of power within Minnesota is expected to become a deficit in the next 3 to 5 years. There is consensus that at least part of this situation is attributable to the unsettled state of the electric industry. Some commenters felt that the legislature and regulators, independent of the retail competition debate, should become more involved with MAPP and the industry to address this issue. Some feel that the regional focus should begin now and address these current shortfalls as a way to transition to a regional governance with full wholesale and retail competition.

j. Planning

Some commenters wondered how planning would proceed under retail competition. Who would decide when and where to build plants? Who would ensure that too many or too few were not built? Who would represent the public interest? How meaningful would planning be if there was no enforcement or implementation of the planning decisions? Other commenters said that the market would resolve these issues.

C. Distribution Reliability, Infrastructure, And Regulation Issues

Pursuant to Laws 1998, Chapter 380, the Legislative Electric Energy Task Force (LEETF) solicited comments from the technical advisory work group members on the following questions relating to distribution reliability, safety, and maintenance:

- What safety standards should be used to ensure reliability, safety, and efficient operation of the distribution system?
- What options are available to identify and establish the respective rights and responsibilities of distribution utilities, consumers, and competitive power suppliers regarding electric reliability and continuity of service?
- What alternatives can be used, or standards developed, to address issues relating to the provision of billing, metering, and customer service?

In response to these questions, a number of issues were raised by the work group members. The following summarizes in general terms the issues raised and comments made by work group members in writing and during meetings with LEETF staff. This section is not intended to list every issue raised in response to these questions but rather to summarize. It is likely that other issues of importance relating to these questions will be raised as the LEETF continues its work examining issues relating to potential restructuring of the electric industry.

1. Background

The distribution system generally is understood to refer to the wires and other facilities used to deliver electricity from the transmission system to the end-user. Under current Minnesota law, the state is divided into exclusive service territories within which a specified utility is required to provide electric service to consumers. Minn. Stat. □ 216B.37 (1996).

It is commonly assumed that if the electric industry in Minnesota is restructured to allow customers to choose their supplier of electricity, the distribution of electricity will remain a regulated monopoly service. In other words, the current providers of distribution services will maintain exclusive service territories within which they will continue to be required to provide distribution service. Beyond this assumption, however, the work group comments reveal there is no consensus about: (1) the regulation that should be in place governing distribution providers; (2) how the rights and responsibilities of the various parties using the distribution system should be determined; or (3) issues relating to billing, metering, and customer service.

2. Distribution Questions

a. What safety standards should be used to ensure reliability, safety, and efficient operation of the distribution system?

In response to this question, two main issues were raised:

- Regulation relating to safe construction and operation of the distribution system; and

- Adoption of performance standards and monitoring mechanisms.

Safe Construction and Operation of the Distribution System

The work group members recognized that there are existing state and federal standards, such as the National Electric Code, the National Electric Safety Code, and OSHA regulations, in place governing the safe construction and operation of the distribution system. In addition, some members commented that utilities have their own company safety standards.

Most work group members believe that the existing standards and system of oversight are sufficient to ensure safety with respect to installation and operation of the distribution system. One work group member also noted that adoption of individual state standards governing construction and operation of distribution systems could be problematic for rural utilities if the standards are inconsistent with the requirements set forth by the federal Rural Utility Service (RUS). Rural utilities must comply with those requirements to receive low interest loans through the RUS.

However, at least one work group member believes that the existing standards for construction and operation safety are not sufficient and that additional, specific state standards should be adopted. This work group member commented that the national standards give the utilities some flexibility and that at least some utilities are doing the minimum necessary to comply with these standards as part of cost cutting measures. The work group member believes that this minimal compliance with existing standards is not sufficient to ensure safety during construction and operation.

Still another work group member believes that the legislature should clarify the relevant agency responsibility for implementation and enforcement of the National Electric Safety Code and require all utilities to follow the standards in the code.

Performance Standards and Monitoring

Some work group members responded that specific performance measurement standards and monitoring procedures for power quality and continuity of service applicable to distribution providers should be adopted. Others suggested the adoption of such performance standards should be considered, and still others stated that the existing regulatory structure of oversight by the Minnesota Public Utilities Commission (PUC) is sufficient to ensure reliability of the distribution system.

A number of different methods were proposed for developing performance standards, if the state chooses to do so, including: authorizing the PUC to conduct a work group on the issue, polling customers, performing a national best practices search, requiring the PUC to establish and adopt the standards, and having the industry self-regulate by establishing its own standards. Several work group members commented that any new reliability or performance standards should be flexible enough to consider the type and location of the utility facilities. Similarly, some of the work group members noted that such standards are not well suited to legislative oversight but should be left to the PUC to adopt because of the need for flexibility in establishing different standards for different utility facilities. Some work group members also commented that enforcement of any new standards with respect to municipal utilities and cooperatives should be accomplished by direct customer participation in the utility through self-governance. Finally, some work group members suggested that performance or incentive based ratemaking should be considered to encourage reliability.

b. What options are available to identify and establish the respective rights

and responsibilities of distribution utilities, consumers, and competitive power suppliers regarding electric reliability and continuity of service?

It is generally assumed that if generation of electricity is deregulated in Minnesota and customers are allowed to choose their supplier of electricity, there likely will be more parties involved in a customer's purchase of electricity. The consumer will no longer necessarily be dealing with one vertically integrated utility but instead the transaction could involve many different entities such as a separate electricity supplier, transmission provider, and distribution provider. As a result, the rights and responsibilities of the various parties involved may also change.

Methods for Determining and Establishing the Rights and Responsibilities of Market Players

Several different options were suggested by work group members "to identify and establish the respective rights and responsibilities. . . ." At least three work group members responded that the legislature should establish general guidelines governing the rights and responsibilities of all participants and that the PUC should implement those guidelines. Another work group member responded that the rights and responsibilities should be based on the wholesale model. FERC has assigned rights and responsibilities between customers and transmission providers in the wholesale market. One work group member suggested that the products and services that are necessary for the bulk power system to provide reliable, safe and commercially viable power to the distribution system be identified and used to establish the obligations and rights among the various parties to ensure that reliable, continuous power is provided. One work group member suggested that the LEETF should begin by identifying the needs of consumers and then develop the rights and responsibilities of the various participants to ensure those needs are met. Similarly, one work group member stated that identifying and establishing the responsibility of power suppliers and distribution companies must focus on access to service, availability of electric supply and service affordability in order to ensure continuous service. Finally, one work group member suggested that the PUC should establish rights and responsibilities at the investor-owned utility level through rulemaking and that at the municipal level, the city council or local utilities commission should retain the authority for determining the rights and responsibilities as between customers and municipal utilities.

Specific Rights and Responsibilities

While many work group members suggested options for identifying the respective rights and responsibilities of the various parties, most of the comments on this topic focused on the specific rights and responsibilities that should be established for various participants in the electric market (distribution companies, electric supply providers, consumers, transmission owners, etc). The specific rights and responsibilities of each market participant that were proposed by the different work group members varied widely. The different detailed proposals are too numerous to list as part of this summary document.

c. What alternatives can be used, or standards developed, to address issues relating to the provision of billing, metering, and customer service?

The following issues were raised in response to this question:

- Whether billing, metering, and customer service should continue to be regulated services provided by the distribution company if the electric industry is restructured;
- Safety issues relating to metering;
- Access to information; and
- Consumer protection.

Provision of Billing, Metering, and Customer Service

Several different views on this question were identified. Some work group members believe that these services should continue to be provided as regulated services by the distribution utility, some work group members believe that these services should be offered competitively, and still others believe that the legislature should delay a decision on this question until after the initial phases of restructuring have been implemented assuming the legislature or Congress adopts restructuring legislation. Some work group members believe the competitive market could provide these services more efficiently than a regulated entity, whereas others believe that the potential savings either do not exist or are not sufficient to offset the potential problems associated with this additional unbundling step. One work group member commented that if the legislature takes action with respect to this issue, it should adopt a general philosophy governing all electricity providers consistently regardless of corporate form.

Installation and Removal of Meters

Several work group members expressed safety concerns with respect to customers installing and removing their own meters. Some work group members commented that, regardless of ownership of the meter, any work that is done relating to the meter must only be done with the prior knowledge and agreement of the local distribution company, or by the local distribution company itself.

Access to Information Generated by Meters and Customer Bills

Several work group members commented on the need for guidelines governing the ownership, privacy, and exchange of information generated by meters and customer bills. Information regarding the amount of energy used in the system is necessary for generation, distribution, and transmission providers for billing, planning and reliability purposes.

Consumer Protection Relating to Billing, Metering and Customer Service

Some work group members commented that there should be a "Consumer Bill of Rights and Responsibilities." At least one work group member stated that the "Consumer Bill of Rights and Responsibilities" should outline a process for complaint resolution, credit, billing and collection regulations, marketing abuses, service disconnections, metering, and other issues. These comments regarding a "Consumer Bill of Rights," while relevant to distribution, safety and reliability, are probably more properly addressed in response to section 2, subdivision 5 of chapter 380 regarding consumer protection.

D. Energy Prices and Price Protection Mechanisms

The debate about whether to restructure the electric industry has included a discussion about the potential benefits and costs of restructuring in the state of Minnesota. In Laws 1998, Chapter 380, the legislature required the LEETF, with the assistance of a technical advisory work group, to address several topics relating to this discussion including:
1) the potential benefits and costs of the implementation of retail competition in the state;
2) the potential distribution of the costs and benefits over time;
3) alternative mechanisms to protect consumers from unwarranted potential price increases that may be attributable to electric industry deregulation during a transition to a competitive energy market; and
4) means to ensure that prices offered by competitors are nondiscriminatory and

that all customer classes benefit from competition.

The members of the technical advisory work group were asked to submit comments to the LEETF on these four topics. The following summarizes in general terms the issues raised by the comments and at the October 30 meeting with work group members, highlighting areas of consensus and disagreement. It is likely that other issues of importance relating to these topics will be raised as the LEETF continues its work examining issues relating to potential restructuring of the electric industry.

1. Potential Benefits and Costs

With regard to the potential benefits of restructuring, there seemed to be consensus among work group members that restructuring could potentially create the following benefits: customer choice, innovation in products and services, risk management tools, and a more efficient use of resources. At least one work group member stated that improved customer service would also result from restructuring, but this view is not a consensus view.

There was consensus that restructuring also would include some increased transaction costs. The work group members, however, had different views on: 1) the magnitude of these costs; 2) which of these new costs might result from retail restructuring (some costs could be wholly or partially attributable to wholesale competition); and 3) which of these costs would only be temporary and which would be permanent. Some of the potential transaction costs that were mentioned include: marketing and advertising costs; the costs associated with an increased number of transactions such as scheduling, accounting, metering; the costs of additional infrastructure such as an independent transmission entity and information systems; and consumer education costs.

Other potential costs raised by work group members include: "stranded costs,"(1) reduced reliability, inconvenience for residential customers, "stranded customers,"(2) increased environmental impacts, increased financing costs, and the loss of public benefit programs. There was no consensus regarding the likelihood of these potential costs mentioned by one or more work group members.

There was also disagreement among the work group members about whether the potential change in the retail price of electricity would be a benefit or a cost of restructuring. Generally those who favor moving forward with retail competition believe that the average price will be lower than under the current regulatory structure and generally those who oppose moving forward believe the average price will be higher under a restructured market. There seemed to be consensus that the price of electricity would move toward a regional market price but there was a split as to whether the average price of electricity would be higher or lower than the regulated price.

Similarly, there was disagreement among the work group members as to whether the total benefits of restructuring would outweigh the total costs. Several work group members felt that overall the benefits would outweigh the costs, several work group members took the opposite position, and a few work group members were uncertain about the net result. There was consensus, however, that the costs and benefits that may result if Minnesota restructures its electric industry will depend upon what type of market develops: a robust competitive market, a market dominated by players with market power, or an immature market. To achieve the greatest benefits, all agree there needs to be a robust competitive market.

2. Price Studies and Analyses

As part of the comments on the potential costs and benefits of restructuring, several different studies looking at the effects restructuring will likely have on electric prices were presented. These studies are either national or regional in scope. The conclusions of the studies vary from lower average electric prices to the same or higher average prices, depending upon the assumptions that are used in the particular study.

At the meeting of the work group members, there seemed to be consensus that these studies on the potential price effects of restructuring the electric industry are very general in nature and therefore are not particularly instructive as to how prices in Minnesota might change if the state restructures. There was general agreement that the price effects would depend upon the specifics of Minnesota's restructuring plan. For this reason, the work group members did not believe it would be particularly useful for the LEETF to hire an economist to compare the studies cited in the comments or to do a general study of the potential price impacts of restructuring in Minnesota.

Instead, there seemed to be agreement that the state should determine first what the current costs of electric generation, transmission, and distribution are for all utilities and all classes of customers in the state. Such an analysis could be used as a baseline for comparison with prices if restructuring is implemented. Additionally, some work group members felt it might be worthwhile for the task force to hire an economist to conduct an analysis of several specific restructuring scenarios. Such an analysis may be generally instructive. However, because it is very difficult to predict the specifics of any restructuring plan that the legislature may adopt in the future, the analysis may not be reflective of the potential effects of legislation, if any, ultimately adopted by the state of Minnesota.

In addition to the studies on the potential price effects of electric restructuring, several work group members who favor restructuring also cited a study on the effects of deregulation on other industries. This study shows general price reductions in those industries. There is no consensus, however, as to how instructive this study is with respect to potential restructuring of the electric industry and electric prices in Minnesota.

3. Effective Competition

In the comments and during the meeting on October 30, 1998, the work group members recognized that in order to have robust, effective competition at the retail level, certain market infrastructure changes must be in place. It was also agreed that any restructuring legislation should include measures to promote effective competition and prevent market power abuse. Such measures are necessary to allow all customers to derive the greatest benefit from any restructuring plan.

In response to the question "what changes are needed to ensure effective retail competition?" the following market infrastructure changes were raised:
1) an independent transmission entity with control of and management authority over the transmission system on a regional basis;
2) open access to the distribution system;
3) adequate and accurate pricing and system availability information;
4) an even playing field;
5) encouragement of aggregation;
6) effective wholesale competition;
7) improvements to the bulk power system;
8) an accurate, real-time transaction management system that can operate within and between regions;
9) legal authorization for a single entity to define and enforce bulk power reliability requirements;
10) divestiture of generation assets by utilities or limits on market share for

generation;
11) standard offer requirement;[3]
12) elimination of any physical infrastructure conditions creating market power; and
13) allowing large customers to choose their power supplier first.

With respect to the first five items, there is consensus that these changes to the system are necessary to ensure effective competition and should be in place before retail competition is authorized. With regard to the last eight, there is disagreement as to whether these steps are necessary to ensure effective retail competition and whether these changes should be in place before authorization of retail competition in Minnesota.

There is general agreement that the wholesale market is still developing and is not yet fully competitive. However, there is disagreement as to whether the state should wait for the wholesale market to fully develop before authorizing retail competition. Similarly, there is disagreement as to whether the state should wait to authorize retail competition until: 1) an entity is legally authorized to enforce reliability requirements; 2) a transaction management system is in place; and/or 3) physical improvements are made to the bulk power system. All of these changes should allow greater competition at the wholesale level.

Also, some work group members believe that utilities currently operating in the state should be required to divest themselves of their generating facilities or be limited in their market share of generation capacity as part of any restructuring plan. These work group members believe this step is necessary to prevent market power abuses and promote effective competition. Other work group members believe that divestiture and market share limitations are not necessary.

4. Distribution of Costs and Benefits

Two main issues arose with regard to the distribution of potential costs and benefits: 1) whether residential and other small users would benefit as much as industrial and other large use customers; and 2) whether rural customers would benefit as much as urban customers from restructuring.

Small vs. Large Customers

There was a wide disparity of views on this question. Some work group members felt that in the short run large customers would benefit the most but that in the long run residential and small commercial customers would also receive significant benefits through means such as aggregation. Some work group members stated that small customers would benefit less than large customers because small customers typically have more inelastic demand, and involve higher transaction costs. Others stated that smaller customers should not see an increase in the cost of electricity solely because of restructuring, although the overall prices might be higher for small customers as any existing subsidies in the current system are eliminated or reduced. Finally, some work group members stated that it is uncertain how the benefits would be distributed between small and large customers. Different sources were cited in support of the various positions.

Some of the work group members who believe that restructuring will result in higher prices for small consumers of electricity cited a study done by the National Regulatory Research Institute which found that while the price of gas for industrial customers had gone down significantly with restructuring of the gas industry, the price for residential customers had gone up slightly. There was no consensus among work group members, however, as to whether this study on gas prices is instructive as to the potential effects of restructuring the electric industry on small and large electric consumers.

Rural vs. Urban Customers

As stated above, it is generally understood that if the state restructures the electric industry, it would deregulate the generation of electricity. The transport of the electricity by transmission and distribution companies would remain regulated. Under such a scenario, customers could choose from whom to buy their electricity supply but their current utility would still deliver the electricity to them at a regulated rate.

Most work group members do not think that rural customers would pay any more for electricity generation than urban customers because electric supply costs are not location dependent. It is transportation costs that are location dependent. However, some work group members argue that rural customers could pay more than urban customers for electricity supply due to cherry picking and other factors.

5. Transition Mechanisms to Protect Small Customers.

A number of different mechanisms for protecting small customers during the shift from regulated prices to market prices for electric supply were presented by the work group members. Some sort of price control mechanism, such as a price cap, price freeze or price reduction, for a period of time was suggested by several work group members. The price control could apply only to rates of small customers who do not choose a new energy supplier, to all small customers, or to all customers. A number of states that have restructured their electric industries have adopted some sort of transitional price control mechanism. While some type of price control mechanism was favored by a number of work group members to reduce the risk to small customers during the transition, some work group members cautioned that artificial price controls may stifle the development of competition and market pricing of electric supply. For that reason, a small number of work group members were not supportive of adopting any type of price protection mechanisms.

Other options that were mentioned include:

- promotion of aggregation;
- licensing and oversight of market players;
- securitization;(4)
- provider of last resort/default provider;(5)
- standard offer;
- giving customers a credit when retail market prices exceed regulated costs;
- a limit on the price differential between residential and industrial rates;
- eliminating the certificate of need; and
- limiting market share for generation or requiring divestiture.

Most work group members agreed that promotion of aggregation, licensing and oversight, and some sort of provider of last resort, default provider, and/or standard offer should be part of any restructuring plan. There was no consensus about the other options listed above among the work group members.

6. Means to Ensure That Prices Offered by Competitors Are Nondiscriminatory and That All Customer Classes Benefit from Competition.

The work group addressed the issue of what means could be used to ensure that improper price discrimination among similarly situated customers does not result. Some of the work group members commented that the best protection against improper price discrimination is to allow retail competition to develop as quickly as possible without barriers. Similarly, other work group members felt that existing consumer protection and anti-trust laws would be sufficient to protect against

improper price discrimination.

Other members of the work group, however, believe that some more affirmative steps are necessary to ensure that improper price discrimination does not occur. The following mechanisms were suggested by one or more work group members:

A. a standard offer requirement;
B. price caps or freezes;
C. aggregation;
D. prohibiting redlining;
E. avoiding or minimizing a phase-in of retail competition for large customers first; and
F. adequate funding of low income programs.

Finally, it should be noted that several of the price protection and anti-discrimination measures proposed by work group members such as requiring a standard offer, a default provider, and/or a provider of last resort were also proposed by work group members to ensure universal access to electricity.

E. Universal Service

Universal service is an issue for restructuring because access to electric energy has been provided by a monopoly utility with an exclusive service territory and an obligation to serve everyone in that territory - and that situation will be modified by deregulation. It is important to remember, however, that deregulation would not fundamentally change the monopoly-regulated status of electric distribution and transmission. Moreover, there is a significant amount of electricity that is currently delivered by distribution utilities that has not been generated by a distributing or transmitting electrical utility, so the fact that distribution utilities may be distributing or transmitting electricity generated by others is not a new phenomenon. It is also true, however, that deregulation has brought into question the monopoly provisions of service by distribution and transmission companies in areas such as metering, billing, and independent operation of the transmission system. Those issues are more fully dealt with in other questions raised by Laws 1998, chapter 380.

What is new is that the customer, under deregulation, may choose what supplier of electricity it wants. Customers may have new relationships with electrical service providers and require education as to how to best make choices about those new relationships. Moreover, there are a host of social programs, such as low-income assistance for energy purchases and conservation programs that may need to be reassessed and/or redesigned for a competitive electric generation environment.

Laws 1998, chapter 380, section 2, subdivision 4, required the task force to analyze issues relating to the provision of universal energy service in the state, with special emphasis on ensuring affordable service for rural and low-income energy consumers.

Subdivision 4 specifically required the Legislative Electric Energy Task Force (LEETF) to develop:

(1) a needs assessment of the number of low-income individuals and households at or below 150 percent of the federal poverty guidelines and the average energy burden of these individuals and households, expressed as the percentage of overall income dedicated to the payment of energy costs;

(2) an evaluation of alternative, nonbypassable, competitively neutral funding

mechanisms to finance programs to reduce the energy burden of low-income customers;

(3) alternatives regarding program design, administration, outreach, and participation goals for bill payment and energy conservation assistance;

(4) an evaluation of alternatives for ensuring affordable service for individuals who do not or cannot choose an alternate energy supplier, including default supplier and provider of last resort options; and

(5) an evaluation of options to ensure that rural energy consumers continue to receive affordable, high-quality energy service and participate in any benefits attributable to increased competition.

Laws 1998, chapter 380, directed the legislature to analyze nine separate subject areas. It has become obvious in the course of the analysis that most of the subject areas are interrelated and dependent. The universal service subject is no different.

Return to top

GENERAL DISCUSSION

Universal service is generally agreed to consist of two components: access to electric service and affordability of that service. There is consensus that both components should be maintained if there is restructuring. There is also consensus that certain social programs such as low-income heating assistance and cold weather shut-off protection are integral to affordability and should be continued. There is considerable disagreement as to how any social programs to assist affordability should be administered or financed. Some advocate that general tax revenues should underwrite the programs. Others, pointing to the political uncertainty of instituting and maintaining a program requiring annual state appropriations, advocate for some sort of charge related to energy transactions. Many of those advocating for an energy charge argue for a charge that applies to all energy suppliers, not just electric energy suppliers, and including delivered fuel oil.

With respect to access, the critical issue is what entity will provide or arrange to provide electric service to those who do not choose a competitive provider (commonly referred to as a default provider) or to those that have no supplier to choose from (commonly referred to as a provider of last resort). [Default provider in this section will refer to both sorts of providers.] Whether or not the incumbent distribution company may qualify as a default provider is a significant policy issue. Some argue that competition will be inhibited if the incumbent distribution utility retains customers who do not choose, since many customers will not choose even if a better deal is available. Others argue that the incumbent distribution company is the best situated entity to provide default service. Between these two policy alternatives are a range of policy options that will be described below. In the short run, the notion of standard offer service is advocated as a possible mechanism for default provider. A standard offer would be a regulated rate that would be available to those in a particular service area. A customer could avail itself of the standard offer or could seek a competitive supplier.

Intertwined with the issue of choice is the issue of the price that will be allocated to the generation component of the electrical bill. Some states have designated the cost of the generation component as a "shopping charge." If the charge is set high, then customers will more likely opt to choose a competitive supplier. If the cost is set low, then fewer will shop because it will be harder to beat the "shopping charge." A full discussion is beyond the scope of this paper but it bears noting that during the discussion of this issue with the advisory work group there was broad

consensus that accurate information on the individual or unbundled costs of electric energy services is crucial information to possess prior to proceeding with restructuring.

The remainder of this paper will provide the specific analysis required by Laws 1998, chapter 380, subdivision 4.

1. Number And Needs of Low-income People And Households

Very few work group members commented extensively on this issue, but the few who did (primarily low-income advocates) provided extensive commentary. According to these commenters, nearly 19 percent, or 857,937 of Minnesota residents live at or below 150 percent of the federal poverty guidelines [hereinafter "in poverty"]. There are 341,343 households in Minnesota living in poverty. Since Minnesota is a high-cost energy state, principally because of our severe winter, the energy burden of people in poverty is high. The average energy burden of all households in poverty is 15 percent of household income or five times the median income household energy burden. However, electric energy is not a major heating source in Minnesota, so that addressing the entire energy burden of Minnesotans in poverty is not necessarily an issue that has to be dealt with in the context of energy restructuring. There was a concern expressed by several commentators that low-income residents may end up paying high price for a limited selection of energy services. One commenter stressed that an accurate assessment of the needs of low-income people should be undertaken along with an assessment of how well current programs of energy assistance were working.

2. Funding Mechanism For Low-income Programs

The comments on this topic were wide ranging. Some were beyond the technically necessary scope of an electric industry restructuring debate but were advocated as being part of the general subject of low-income energy use. There was general consensus that if a fee or tax was imposed it should be nonbypassable, competitively neutral, and easy to administer.

There are several funding mechanisms that most commenters agree could serve to fund low-income programs. They include general funding from state appropriations, an energy use or wires charge of some kind, self-funding through the utility, and private donations. Commenters from the utility industry and representing large users favored funding from state appropriations. In addition to the general philosophic opposition to requiring private enterprise to fund social programs there is also a concern that user fees or a commodity tax would fall unevenly and perhaps favor some energy providers. If there was to be a wires charge, a meter fee, a customer charge or some other energy-use related fee, most commenters wanted it as broad based as possible including application to other energy including delivered fuel.

Several commenters suggested that the best funding mechanism was a systems benefit charge on each kilowatt hour (KWH) of electricity sold in the state and recommended that consideration be given to applying it to delivered fuel as well.

Another commenter favored an energy charge but suggested several options. The wires charge would be easy to administer but since it is usage based would be quite costly to industrial users unless they were charged a lower rate. A flat fee per user is also simple and easy to administer but is regressive in that it creates a larger burden on those with lower incomes. Finally, this commenter suggested consideration of a model like the current state mandated conservation investment program where a percentage of a utility's or energy supplier's revenues could be allocated to low-income program support.

3. Low-income Program Design, Administration And Outreach

Again, a few commenters devoted particular attention to this issue. In general, there was a consensus that low-income people need assistance so that they can afford energy and that some form of assistance should be provided.

Low-income advocates stressed that programs should be designed to bring the energy burden, in terms of percentage of income of people in poverty, in line with that of people not in poverty. Low-income advocates favored an individual, client-based plan of assistance rather than a generalized level of assistance.

Several types of assistance were mentioned. Lifeline rates would provide an initial block of KWH at a lower cost. A straight rate discount could be provided. Bill payment plans could be adopted, including a percentage of bill payment. Budget counseling, budget billing, deferred payment plans, arreage forgiveness program, weather moratoria, waiver of deposit requirements, late payment fees and reconnection fees, are other tools that could be used in a low-income program.

A utility suggested that providing assistance through a reduction in the monthly budget plan was more appropriate than providing lump-sum assistance to apply against a very unaffordable large bill.

One commenter suggested that assistance should be tiered so that as income goes down, assistance goes up and that a phase-in period, if any, should be as short as possible. Most commenters appeared to support the notion that an education program was necessary to prepare all consumers, including low-income consumers, for retail competition.

There was a wide range of opinion about how the low-income programs should be administered. Some felt that a mix of private, government, and utility administration based on the particular program aspect would be best. Others felt that utility involvement should be minimized. A specific recommendation was to establish a universal fund administrative entity that would be quasi-state in form and function with an advisory board. Another proposal suggested determining the cost of all current energy assistance programs, including current federal assistance, and funding a state universal fund to provide that assistance, whether or not the electric industry is restructured.

Several commenters suggested that conservation services should be provided by the competitive market rather than through mandates on energy providers with a short phase-out period for current state conservation mandates imposed on utilities. Other commenters agreed that conservation programs were part of the universal service equation.

4. Default Service

The issue of what happens to a utility's current customers is one that has been the subject of legislative attention in many states involved with retail competition mandates. There were several themes to the comments. Those themes included strategies to ensure that competitors had a fair shot at obtaining new customers, that incumbents were not advantaged or disadvantaged, and that customers who could not or would not choose a supplier had an opportunity to obtain electric service.

Several options were suggested for providing default service. One commenter stated that most states have required the host utility to be the default provider, even though that may slow the advent of competition and further suggested that if a host utility is the default provider, it could have a standard offer with regulated terms and market offer, with the standard offer probably being higher.

The Department of Public Service (DPS) supported a retail marketing area approach that would aggregate non-choosers in a geographical area. Electric service for non-choosers in that area would be bid out under price and service criteria. A customer could opt out of the retail market area. If the retail market area approach was not adopted, DPS suggested default service could be offered by a host distribution company or bid out for nonchoosing customers.

One commenter suggested that a proportionate distribution of default customers to energy suppliers would be the most fair and most fostering of a competitive market. If there was not lively competition, however, it would seem that the incumbent distribution company would acquire most if not all default customers.

Several commenters discussed proposals to aggregate customers, including having the state serve as aggregator, and bid out the provision of services similar to the retail market area approach.

One commenter discussed an insurance-assigned risk sort of approach with default customers assigned to providers on some basis. The concern was that the prices under this system may be higher and service low.

One commenter recommended that default customers be assigned in the same fashion as customers were allocated to long distance providers - commonly referred to as the ballot and allocation approach. This commenter distinguished between a default provider and a provider of last resort and recommended the telephone model for the default provider and a reinsurance program for the provider of last resort. The distinction was made because the provision of service to people who cannot choose is probably not as attractive or profitable as is provision to customers who could choose and do not.

Several commenters supported the notion of the incumbent distribution utility being the default provider, and there was a general consensus that if unfair competitive advantage was not a concern, that the incumbent distribution utility was a logical choice for a role in providing default service either through a bid procedure, standard offer, or otherwise.

Some utility work group members strongly opposed forcing customers to leave an electric service provider unless a choice was made to do so.

5. Rural Customers

There was a profound divergence of opinion on the effect of restructuring on rural customers.

Some commenters felt there would be no adverse consequences to rural customers due to retail competition for energy supply. They reasoned that the transmission and distribution service would remain the same and that rural customers would simply be given the opportunity to acquire energy supply at a better price. Since generation costs are not transportation dependent, the fact that these customers are sparsely located would not be a concern.

Other commenters felt that there could be dire consequences for rural customers and that they could be left with higher prices and poorer services than more desirable industrial and urban customers. They reasoned that if the integrated utility currently serving them lost their large customers, the fixed costs of the rural providers would be spread over a smaller base of customers resulting in higher prices or reduced maintenance or both.

Municipals and cooperatives are seen as particularly vulnerable due to their rural customer base, particularly in the case of cooperatives. Some states have allowed

municipals and cooperatives to opt out of retail competition if they do not engage in retail competition themselves.

Endnotes

1. "Stranded costs" are generally understood to refer to financial obligations incurred by utilities to serve customers in a regulated market which will be unrecoverable in an unregulated market. "Stranded costs" are generally understood to refer to financial obligations incurred by utilities to serve customers in a regulated market which will be unrecoverable in an unregulated market.

2. "Stranded customers" is a term used by at least one work group member to refer to customers who are unable to find an electric supplier willing to serve that customer. "Stranded customers" is a term used by at least one work group member to refer to customers who are unable to find an electric supplier willing to serve that customer.

3. A "standard offer" requirement generally is understood to refer to a requirement that all electricity sellers make the same pricing and other terms available to all similar customers in a class. When applied to existing utilities during a transition to retail competition, the term means that each utility offers basic electric service at a price based on the utility's regulated costs to residential and small business customers in the utility's service territory who do not choose another provider for a period of time after retail competition is introduced. A "standard offer" requirement generally is understood to refer to a requirement that all electricity sellers make the same pricing and other terms available to all similar customers in a class. When applied to existing utilities during a transition to retail competition, the term means that each utility offers basic electric service at a price based on the utility's regulated costs to residential and small business customers in the utility's service territory who do not choose another provider for a period of time after retail competition is introduced.

4. "Securitization" refers to a financing tool which has been authorized in some state restructuring plans generally used to allow incumbent utilities to finance stranded costs, rate reductions, and/or other transitional costs. "Securitization" refers to a financing tool which has been authorized in some state restructuring plans generally used to allow incumbent utilities to finance stranded costs, rate reductions, and/or other transitional costs.

5. A "provider of last resort" is generally understood to refer to a provider for customers who are not able to find a provider willing to serve them. A "default provider" is generally understood to refer to a provider for persons who do not choose a new supplier of electricity or whose provider suddenly leaves the market or otherwise fails to provider electricity. A "provider of last resort" is generally understood to refer to a provider for customers who are not able to find a provider willing to serve them. A "default provider" is generally understood to refer to a provider for persons who do not choose a new supplier of electricity or whose provider suddenly leaves the market or otherwise fails to provider electricity.

Send comments regarding this site to:
www@commissions.leg.state.mn.us
Last Updated: Monday, 06-Nov-2000 12:47:26 CST