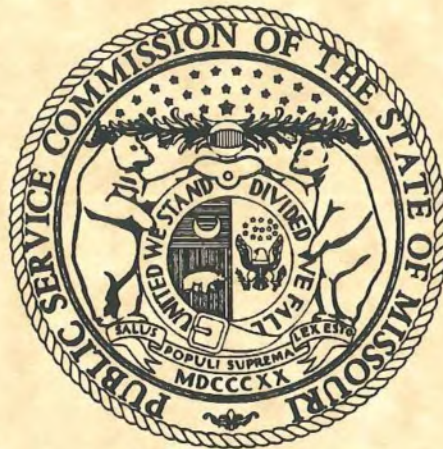


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MISSOURI  
PUBLIC SERVICE COMMISSION

FINAL REPORT  
OF THE  
TASK FORCE ON  
RETAIL ELECTRIC COMPETITION  
OF THE  
MISSOURI PUBLIC SERVICE COMMISSION



MAY 1, 1998



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### RE: Retail Electric Competition Task Force Report -- Case No. EW-97-245

Dear Commissioners:

As directed by Commission order, the Retail Electric Competition Task Force today presents its Report and Recommendations on Retail Electric Competition in Missouri. The full report is comprised of two sections: this document and an Appendix that consists of the four Working Group reports and Legal Committee report to the Task Force.

The Commission created the investigatory docket as a formal means "to identify the risks and benefits that would face the state of Missouri in the event retail competition occurs." (*In the Matter of a Commission Inquiry Into Retail Electric Competition*, March 28, 1997, PSC Case No. EW-97-245). Further, the Commission established the docket to create a public record that would "enable all members of the public, including their elected representatives in the General Assembly as well as the Office of the Governor, to become knowledgeable" on the issues involved in the electric restructuring debate.

This Report accomplishes the mandate of the Commission. It will be instructive not only to executive branch and legislative policymakers, but also to all consumers of electricity—industrial, commercial and residential. And while the Report does not present a roadmap for implementing a competitive electric market in Missouri—that was not the Task Force's mission—it delineates key issues, options and makes many specific recommendations that should help shape the restructuring debate in future months.

Respectfully,

A handwritten signature in dark ink, appearing to read "Dana K. Joyce".

Dana K. Joyce  
General Counsel and  
Task Force Moderator

FINAL REPORT  
OF THE  
TASK FORCE ON  
RETAIL ELECTRIC COMPETITION  
OF THE  
MISSOURI PUBLIC SERVICE COMMISSION

Case No. EW-97-245

Filed May 1, 1998

Corrected Filed May 19, 1998

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## Acknowledgments

There is a large cast of persons to acknowledge who played important roles during the ten months the Task Force has been in existence, among them the working group chairs and working group (PSC) staff vice chairs: **Richard Malon** (Market Power/Structure chair), **Maurice Brubaker** (Stranded Costs chair), **Robert Fancher** (Reliability chair), **Jerry Harris** (Public Interest Protection chair), **Michael Proctor** (Market Power/Structure staff vice-chair), **Mark Oligschlaeger** (Stranded Costs staff vice-chair), **James Watkins** (Reliability staff vice-chair), and **Debbie Bernsen** (Public Interest Protection staff vice-chair), and moderator **Dana K. Joyce**.

The PSC General Counsel's Office staff provided the Task Force and Working Group staff support throughout the many months of meetings, specifically **Rosemarie Riedl**, **Toni Willmeno** and **Tracie Hunsaker**.

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### CHAPTER 1

## INTRODUCTION AND OVERVIEW

### Task Force History

In a series of *Orders* entered in Spring of 1997, the Missouri Public Service Commission ("Commission") established docket number EW-97-245 and created the Retail Electric Competition Task Force. In its March 28, 1997 *Order*, the Commission noted that "a national inquiry is underway to determine whether the electric utility industry should be restructured to permit customers to choose their supplier of electricity. . ." The Commission said that the restructuring movement started in states with "high cost" electric rates, but it noted that Congress was looking at laws relating to industry restructuring and pointed out several initiatives reflecting the fact that even in the state of Missouri, large industrial users and small consumers were interested in lowering their costs of electricity.

In its May 23, 1997 and June 13, 1997 *Orders*, the Commission named thirty-five members and three alternates to the Task Force, noting in the May *Order* the overwhelming response to its request for nominees to serve on the body.

Ten persons were named from the utility industry, including investor-owned, rural electric cooperatives and municipal utilities. Government representatives included two senators and two representatives from the Missouri General Assembly, the Public Counsel, two members from other state agencies and two representatives of municipalities that were not in the electric utility business. In addition, three representatives were named from firms that provide a competitive alternative to traditional utilities, and twelve persons were selected to represent a diverse range of consumer interests, ranging from commercial and industrial users to individual consumers. The executive director of the Commission was also named to the Task Force to represent Commission Staff and the Commission's general counsel was chosen as Task Force moderator.

The Commission, in its June 13, 1997 and July 18, 1997 *Orders*, further expanded the breadth of the Task Force process by creating and selecting thirty Task Force members and twenty-four other nominees to serve on the five permanent Working Groups: Market Structure and Market Power (which were later merged); Public Interest Protection; Stranded Costs; and Reliability. (The Acknowledgement Section of this report contains a listing of the Working Group membership.) The Commission selected chairs and vice-chairs for each group, who along with the Task Force moderator, comprised the Executive Committee. To further assist the Task Force, the Commission

## **INTRODUCTION AND OVERVIEW**

established a Legal Committee, which reviewed issues that the Executive Committee and the permanent Working Groups presented to it.

In its June *Order*, the Commission set November 4, 1997, as the deadline for the Market Structure Working Group report and February 15, 1998, as the date for all other Working Group reports and the final Task Force report. Subsequently, on February 3, 1998, the Commission established March 6, 1998, as the deadline for all Working Group reports and May 1, 1998, as the due date for the final Task Force report.

The Task Force held its initial meeting on June 25, 1997, and working groups began meeting in August and September. The second Task Force meeting occurred on October 14, 1997. The Task Force also met on November 17, 1997, to receive the Market Structure report. Frequent meetings of the working groups continued through February, 1998. The Legal Committee was appointed in November 1997 and met several times in subcommittee and in full committee to prepare its report to the Task Force on April 6, 1998.

The Task Force convened this year on March 16, March 23, March 30, April 6, April 13 and April 24 for its final round of meetings to review the Working Group reports and prepare its Final Report.

### **The Commission's Charge**

The Commission made clear in its *Orders* that it established a Task Force "to study retail wheeling of electricity and related issues that will face this Commission in the event that retail electric competition should occur." Specifically, the Commission asked the Task Force:

- to compile a comprehensive plan for implementation of retail electric competition in the State of Missouri in the event legislation is enacted which authorizes it;
- to survey activity in other jurisdictions implementing or studying retail wheeling; and
- to identify specific issues which will face the Public Service Commission, and the state as a whole, should retail competition occur.

The Commission created the investigatory docket as a formal means "to identify the risks and benefits that would face the state of Missouri in the event retail competition occurs." The process was to accomplish several purposes:

**First**, to enable the Commission to focus on issues of particular concern to Missouri.

**Second**, to permit all members of the public to participate in the discussion and to have access to the pleadings and position papers submitted by utilities, industrial users, competitive power suppliers, consumer groups and other organized parties.

**Third**, to shape the course of the debate on electric restructuring as it advances in Missouri.

The Commission's hope in establishing this docket was to create a public record that "will enable all members of the public, including their elected representatives in the General Assembly as well as the Office of the Governor, to become knowledgeable" on the issues involved in the electric restructuring debate.

### **Report Approach**

From the outset, the Task Force determined that the diversity of the group, while an asset for making sure all viewpoints were considered, made it unlikely that it would agree on major policy issues. For example, there is no consensus opinion on issues such as how Missouri would best restructure the electric industry, or whether, and if so, how, utility company "stranded investments" should be recovered in a restructured environment.

The Task Force in its initial meetings discussed the option of preparing a majority report making recommendations across the board, with minority reports to accompany it. Such an approach would have required voting on positions and policy recommendations throughout the Task Force proceedings. After some deliberation, the group agreed to proceed with a consensus approach that would include multiple viewpoints, some discussion of pros and cons on the issues, but limiting recommendations to things that the entire group could accept. The working groups adopted this approach in developing its reports and the Task Force attempted to do the same in this Final Report.

While the consensus approach did not permit for policy recommendations on major issues, the recommendations the Task Force have made provide a basic roadmap of pitfalls and problems that need to be addressed, as well as some general guidance for policymakers addressing electric industry restructuring issues. In that vein, the report attempts to fulfill the Commission's charge "to identify the risks and benefits that would face the state of Missouri in the event retail competition occurs." Some may not be pleased with this approach, but it complies with the Commission's desire to produce a record that permits the members of the public, the General Assembly, and the Office of the Governor "to become knowledgeable" on the issues involved in the electric restructuring debate.

## **INTRODUCTION AND OVERVIEW**

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### **Overview of Final Report**

The final report consists of two documents. First, there is this document that contains a summary analysis of major issues in the Working Group and Legal Committee reports, a discussion of possible options and, when possible, the Task Force's recommendation.

Second, the final report contains a separate Appendix, which is comprised of each Working Group report, as filed in the case on March 6, 1998, and the Legal Committee report, filed April 10, 1998, which itself is made up of four separate sections relating to tax issues, statutory impediments to electric restructuring, possible new industry structures, and stranded costs. The summary and recommendations section of the final report is derived in large part from the working group reports in the Appendix.

## CHAPTER 2

### MARKET STRUCTURE

#### KEY CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS

Market structure is the specification of the various business units and a framework that describes how these business units will interact. The electric industry as currently structured includes the following business units:<sup>1</sup>

**Generation** is the function of producing electricity and delivering that power to the interconnected transmission grid at the required voltage level.

**Transmission** is the function of transporting electricity at high voltage from the generators to the local distribution systems.

**Distribution** is the function of delivering electricity at low voltage from the transmission system to the end-use consumer.

**Customer Service** is the function of metering and billing the end-use consumer.

A restructured electric industry will involve new business entities. Depending on the market structure, the following business entities will be involved.

**Generator (GENCO)** is the firm that produces electricity for sale in a competitive market for electricity. These firms might be what is currently a part of the vertically integrated utility, or might be completely independent of any other utility functions.

**Transmission Owning Utility (TOU)** is the firm that owns transmission facilities. Currently, transmission facilities are owned by utility companies.

**Independent System Operator (ISO)** is an entity that operates a regional network of transmission facilities, but does not own those facilities. It is independent of the utilities in the sense that the utilities are not able to control the operations of the ISO.

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<sup>1</sup>The following material comes from the Report Summary section of *Alternative Market Structures for Retail Competition [Alternative Structures]* – the Market Structure and Market Power Working Groups Report to the Task Force contained in the Appendix to this report.



## MARKET STRUCTURE

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*Local Distribution Utility (LDU)* is the utility business unit that provides distribution wires services to end-use consumers, may provide customer services and may provide certain limited generation services. The LDU's services will be provided to end-use consumers at regulated rates.

*End-Use Consumers* are the ultimate users of electricity, including industrial, commercial and residential end users that can be served by any number of alternative providers of electricity.

*Retail Electric Provider (REP)* is an entity that sells electricity to end-use consumers, buys or procures electricity from generators, and arranges for the transmission of electricity with either the TOUs or the ISOs. In effect, REPs are the retailers of electricity. In certain market structures, the REP may also provide customer services. If a vertically integrated utility chooses to be a REP, that function will be provided by a separate entity from the LDU.

*Poolco* is an entity that operates a region-wide, competitive market for electricity generation. The poolco has the responsibility and authority for the commercial terms for all transactions of electricity that take place within the region. Sales and purchases of power through the poolco are mandatory.

*Power Exchange (PX)* is an entity that operates a region-wide, competitive market for generation. The PX has the responsibility and authority for maintaining a spot market for electricity. Sales and purchases of power through the PX are optional.

Common structural changes<sup>2</sup> involved in the restructured electric industry will likely include a regional transmission system operated by an ISO that connects the distribution systems of the current utilities which will become the LDUs. Both transmission and distribution will continue to be regulated: transmission by the Federal Energy Regulatory Commission (FERC); and distribution by the relevant state or local regulatory authority. The Task Force assumes that generation will eventually be provided competitively. This means that the current regulatory determination of the rates which retail consumers pay for the cost of generating electricity will no longer apply. Consumers will no longer have the choice of a regulated electricity rate, instead the price which they will pay for generation will be determined in a competitive market place. However, customer services such as metering and billing may either be provided competitively or continue to be provided by the LDU on a regulated basis.

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<sup>2</sup>The details of common structural changes that are likely to occur irrespective of the specific form of the market structure are discussed in detail in Chapter 1 of *Alternative Structures*, as contained in the Appendix to this report.

Transmission will likely evolve to where the TOUs will have turned over the operational control of their transmission assets to a regional ISO that will operate those facilities as a regionally integrated network. The ISO will have a region-wide transmission tariff that is regulated by the FERC. The ISOs will maintain the reliability of the transmission network, following regional reliability council standards and procedures. A major function of the ISO will be to approve the scheduling of electricity in such a way as to maintain the security of the wires and provide a level playing field for commercial opportunities to buy and sell power.

The distribution function involving ownership, planning, construction, maintenance and storm restoration of the local distribution system will be provided as a regulated service by the LDU. However, metering, meter reading and billing could be provided on a competitive basis irrespective of the structure used to competitively provide generation services. There is agreement that the LDU will not provide generation services on a competitive basis. If the utility stays in the generation business, that part of its business (its function as a GENCO or REP) must be functionally separate from the regulated part of its business. In some instances, the LDU may be allowed to provide generation services as an agent that simply passes through the costs of generation that have competitively been determined in a market in which the LDU is not acting as a commercial agent that can profit or lose from its actions.

Beyond the structural changes that will be required irrespective of a specific market structure, there are four major issues related to the specific choice of market structure.

### 1. CHOICE OF MARKET STRUCTURE FOR SUPPLYING GENERATION COMPETITIVELY

A fundamental issue in moving to a competitive market for generation is the determination of which market structures to adopt. Three market structures were proposed in the working group's report. The General Assembly will need to determine which of these three (or perhaps another) is most appropriate.

#### OPTIONS:

- (1) **Direct Access** is a structure in which retail consumers can select their electric service provider from among competing REPs. The REPs directly negotiate with consumers to be their electric supplier, and make standard offers of service available for various defined classes of service (e.g., residential general, residential space heating, commercial general, commercial space heating and industrial). Aggregators acting on behalf of groups of end-use consumers may participate in the market, and retail consumers may associate into affinity groups for purposes of acquiring electricity. The LDU provides distribution services and perhaps customer service, but does not provide electric energy services. The REP must schedule the supply of electricity with the ISO and/or individual TOUs if ISOs are not operational throughout the state. The REPs will also serve high-cost/high-risk consumers and will either be assigned

## MARKET STRUCTURE

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to serve consumers that opt not to choose a REP or the right to serve these customers will be determined by a competitive bid.<sup>3</sup>

- (2) **Poolco** is a structure in which generation competition takes place at the wholesale level as generators and power marketers sell electricity to a common pool. For all electricity sold at retail, the poolco purchases electricity on a competitive bid basis, and resells electricity to the LDUs at cost. The LDUs provide electric service to end-use consumers through rates set by the appropriate regulatory agency. These rates include the electric energy costs charged to the LDU by the poolco.<sup>4</sup>
- (3) **Hybrid** is a combination structure in which both REPs and a PX are active in the commercial sales of electricity. The REPs will function in the same fashion as described by the direct access structure. However, the PX has no authority or responsibility regarding electricity supplied by REPs for end-use consumers, and there is no requirement that electricity be sold into or purchased from the PX. The LDU does not supply electricity competitively, but may provide electricity which it purchases from the PX to supply the requirements of high-cost/high-risk consumers and consumers that opt not to choose a REP.<sup>5</sup>

### RECOMMENDATIONS:

The Task Force is not recommending a specific structure to the General Assembly. With any of the proposed structures, or for any other possible structure, there are numerous details that will need to be worked out prior to the actual implementation of the competitive supply of generation. The Task Force recommends that the General Assembly have the Missouri Public Service Commission develop the implementation requirements through a collaborative process that includes representatives from all stakeholder groups. Final approval of the specific details to meet the requirements will involve a rule making and/or hearings before the Commission, or in the case of a poolco/PX and an ISO, will involve filings before the FERC.

## 2. STRUCTURING THE TRANSITION TO RETAIL COMPETITION

The choice of market structure can also be thought of in terms of what will be required in order to reach an ultimate structure. If the ultimate market structure involves retail competition in which REPs directly serve end-use consumers (e.g., either the direct access or hybrid market

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<sup>3</sup>Reference: Appendix, *Alternative Structures*: Chapter 2.

<sup>4</sup>Reference: Appendix, *Alternative Structures*: Chapter 3.

<sup>5</sup>Reference: Appendix, *Alternative Structures*: Chapter 4.

structures), the transition structure is of particular importance. If the poolco structure is chosen, competition will be in the wholesale electric market. Since end-use consumers would remain customers of their current utilities, consumer protection issues will differ from those that would arise during a transition to retail competition. One transition issue that must be addressed if the poolco structure is chosen is whether Missouri-based generators should be allowed to bid their generation into another state's system during the transition. While the poolco model would allow Missouri-based generators to bid their generation into any other state's system, some established phase-in period may be desirable from the consumers' perspective before this aspect of the plan is implemented. The transitional issues discussed below do not apply to the poolco structure.

If the retail electric market were simply opened up to alternative REPs without a transition period, there would be concerns regarding the amount of time that it will take to implement the needed changes in the forecasting of load for REP customers, scheduling (arranging for the transmission of the REPs' generation), balancing (arranging for generation to equal load), settlements (payments for differences between forecasted and actual load), and metering,<sup>6</sup> as well as required changes in customer billing and information systems.<sup>7</sup> In addition, there are concerns about how rapidly REPs will be able to sign up and arrange to provide service to small customers,<sup>8</sup> and whether there will be sufficient competition among REPs in every geographic area throughout the state.<sup>9</sup>

Therefore, in the transition, there will need to be a way to assure that all consumers are served<sup>10</sup> at reasonable rates.

### **OPTIONS:**

In the options that follow, the generation services being provided are to end-use consumers that have not yet obtained competitive generation services from a REP because the electricity

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<sup>6</sup>References: Appendix, *Alternative Structures*: Item 1. Infrastructure Needs – pp. 22–24, 40–41, and 52–54.

<sup>7</sup>References: Appendix, *Alternative Structures*: Item 5. Upgrades to Customer Information Systems – pp. 28 and 58.

<sup>8</sup>References: Appendix, *Alternative Structures*: Item 4. Standard Offers – pp. 25 and 55.

<sup>9</sup>This issue is discussed in Section 1. Monopoly Power Because of Limited Import Capability into Local Control Areas – pp. 22–24 of *Market Power and Other Competitive Issues for Retail Competition [Market Power]* – the Market Structure and Market Power Working Group's Report to the Task Force as contained in the Appendix to this report.

<sup>10</sup>Reference: Appendix, *Alternative Structures*: Item 7. Assignment of Default Customers – pp. 26 and 51–52.



## **MARKET STRUCTURE**

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markets have not fully developed and/or the infrastructure necessary to support a full developed direct access market is not completed.

- (1) Require the LDU to continue to provide generation service from its generation units at embedded cost, including purchases and sales in the wholesale electricity markets through either:
  - (a) The LDU maintaining control of some portion of its generating assets and purchases of wholesale power; or
  - (b) The LDU transferring its generation assets to an affiliate<sup>11</sup> Exempt Wholesale Generator (EWG) and purchasing power from the affiliated EWG at a FERC regulated rate.
- (2) Require the LDU to structurally or functionally separate its generation assets and purchase generation services from a competitive wholesale market, through either:
  - (a) The LDU obtaining competitive bids from alternative wholesale suppliers; or
  - (b) The LDU buying wholesale power from a PX that has purchased the electricity competitively.<sup>12</sup>

### **RECOMMENDATIONS:**

The Task Force recommends that public interest protection be given a high priority during the transition. At this time it is not clear which of the above options provides the highest level of protection to end-use consumers. What is clear is that in order to protect consumers during an initial transition period, the LDU should provide generation services for consumers that have not yet obtained those services from competitive sources. The General Assembly should have the Commission make a determination about which transition structures will provide strong protection to end-use consumers and at the same time promote strong competition in generation. If the Commission determines that the level of protection is strong for option (2), then in order to promote competitive supply of generation and the separation of generation from the LDU's wire function,<sup>13</sup> the generation provided by the LDU should be competitively procured, either through a power pool

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<sup>11</sup>The EWG need not be a separate company, but may in fact be a separate division of the same company. For example, municipal utilities would not set up a separate company, but instead would set up a separate division.

<sup>12</sup>The PX may need to be modified to allow more than spot market transactions.

<sup>13</sup>Reference: Appendix, *Alternative Structures*: Item 2. Company Structure – pp. 23, 37, 49; and *Market Power*: Item 4. Incumbent Utility Being the Default Provider – p. 10.

or competitive purchases by the LDU – option (2). If the General Assembly chooses the direct access structure but wants the Commission to consider the transition option of having a PX, then the authority for the Commission to require the establishment of a transitional PX should be included in the law. The state or local regulatory authorities will need to decide how rates will be set to collect the LDU's purchased power costs.<sup>14</sup> During the transition, the LDU's rates should be unbundled among generation, transmission and distribution services.<sup>15</sup>

### 3. MUNICIPAL/COOPERATIVE PARTICIPATION IN COMPETITIVE GENERATION

The General Assembly needs to determine whether municipal and/or cooperative electric systems will be exempted from retail competition and to what extent the exempted entities that have generation would be allowed to participate in the competitive market for retail load.<sup>16</sup>

#### OPTIONS:

- (1) Require all utilities to have a competitive supply of generation; or
- (2) Allow municipal and cooperative electric systems the option not to participate in the competitive supply of generation.

If the second option is taken, there are additional questions that must be considered regarding the degree of involvement by municipals and cooperatives in the competitive generation markets.

#### RECOMMENDATION:

The Task Force recommends that the General Assembly give municipals and cooperatives the option whether to participate in the competitive supply of generation.

### 4. PROVISION OF BILLING SERVICES

There are significant concerns about how end-use consumers will be billed when alternative REPs would potentially be providing a portion of the electric service (generation and transmission)

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<sup>14</sup>References: Appendix, *Alternative Structures*: Section 4. Purchased Power Cost Recovery for LDUs – p. 36; and *Market Power*: Item 5. Compensation to the LDU as Default Provider – p. 12.

<sup>15</sup>References: Appendix, *Alternative Structures*: Item 4. Rate and Bill Unbundling – pp. 24, 38 and 49–50; and *Market Power*: Item 6. Unbundling Generation Rates through Credits to Bundled Rates – p. 13.

<sup>16</sup>References: Appendix, *Alternative Structures*: Item 3. Municipal Participation in Retail Competition – pp. 8–9; Item 6. Municipals and Cooperatives: Opt In/Opt Out – pp. 23 and 48; and Item 7. Municipals and Cooperatives: Opt In/Opt Out – p. 37.



## **MARKET STRUCTURE**

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and the LDUs would be providing the remaining portion of the electric service (distribution and perhaps metering).<sup>17</sup>

- If both the LDU and REP send separate bills to the end-use consumers, this may be confusing for the consumer.
- If the LDU is required to include the REP charges on a single bill to end-use consumers, some of the LDUs current billing systems are not adequate to handle the complexity brought about by multiple REPs.
- If end-use consumers are given the choice between the LDU and the REP as the source of billing, there may be significant duplication of billing costs.
- If end-use consumers receive a single bill, how partial payments are to be allocated between the regulated and competitively provided services will need to be determined.
- Revised rules for termination of service for nonpayment of electric bill to either the LDU or REP will need to be established.

In the poolco structure, the LDU would purchase electricity from the poolco and would show the purchased electricity costs as a separate item on the single bill. Thus, the provision of billing services would not be an issue for the poolco structure.

### **OPTIONS:**

- (1) Not give end-use consumers the choice of having a single bill, i.e., separate billing for separate services; or
- (2) Require the LDU to provide a single bill; or
- (3) Require the REP to provide a single bill; or
- (4) Require both the LDU and the REP to stand ready to provide a single bill and allow the end-use consumer a choice of billing agent; or
- (5) Allow competitors to bid to provide single billing.

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<sup>17</sup>References: Appendix *Alternative Structures*: Section (5) Customer Service Business Unit – p. 19; Section (5) Distribution Business Unit – p. 34–35; and Item 2. Metering and Billing Options – pp. 25 and 51]

### RECOMMENDATIONS:

- (1) The Commission should consider giving end-use consumers the option of having a single bill.
- (2) The General Assembly should require the appropriate state or local regulatory authorities to determine which of the above options will work best for different situations (e.g., differences between investor-owned utility billing systems, or differences between municipal, cooperative and investor-owned billing systems and practices).
- (3) The General Assembly should require the appropriate state or local regulatory authorities to set out rules for the allocation of partial payments between LDUs and REPs, as well as rules for termination of service for non-payment of the electricity bill.

### 5. PROVISION OF METERING SERVICES

With the competitive provision of generation services, the source of electric usage data for various needs becomes a significant concern. There are three functions involved in providing metering services that have generally been offered by utilities:

- **Meter Service** includes installing, validating, registering, and maintaining the physical meter required on a premise to measure the required usage.
- **Meter Data Management** includes validating, editing and estimating raw meter outputs, adding corollary information needed to characterize the customer, and making complete information available to others for use in various approved applications.
- **Meter Reading** is the process by which usage information is conveyed from the meter to the meter data management function.

With the addition of multiple providers of generation services, there will be multiple needs for information on end-use consumer usage for purposes of forecasting as well as calculation of customers' bills. This information needs to be made available to those who need it on an accurate, secure and timely basis.<sup>18</sup>

### OPTIONS:

- (1) Require LDUs to provide all metering services; or

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<sup>18</sup>References: Appendix, *Alternative Structures*: Section (5) Customer Service Business Unit – p. 19; Section (5) Distribution Business Unit – p. 34–35; and Item 2. Metering and Billing Options – pp. 25 and 51]

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- (2) Allow REPs to provide their own metering services requirements; or
- (3) Allow competitors to bid to provide the various metering services.

### **RECOMMENDATIONS:**

- (1) During an initial transition period, the Task Force recommends that the General Assembly allow basic metering services to continue to be provided on a regulated basis by the LDUs. This recommendation does not mean that REPs would not be allowed to provide additional customer services that have not generally been offered by utilities and would therefore be considered competitive services.
- (2) Beyond an initial transition period, the Task Force recommends that the General Assembly determine whether and when non-LDU provision of metering services is appropriate, and whether such services should be provided on a regulated or competitive basis.
- (3) The fact that any entity has control of meters, metering and acquired data could allow restrictions on competition via unnecessary technical requirements and excessive metering costs. The Task Force recommends the General Assembly require the appropriate state or local regulatory authorities to implement rules that will avoid these unnecessary restrictions.

**CHAPTER 3**

**PUBLIC INTEREST PROTECTION**

**ISSUES, OPTIONS AND RECOMMENDATIONS**

Electric service is essential to the health and welfare of Missouri citizens. All Missouri consumers, including high-risk consumers, should have access to a basic level of affordable and reliable electric service at just and reasonable rates.

The concept of “public goods or benefits” is referred to in discussions of funding programs like low income assistance and weatherization programs. Public goods are defined as things that will not be produced and delivered solely by the free market but produce a value to society at large. They are “public” because they are consumed by the public and their use cannot be restricted to the benefit of a single buyer or group of buyers. A public benefits charge should be evaluated as a way to fund low-income programs and weatherization measures.

**ISSUES**

**1. CONSUMER EDUCATION<sup>1</sup>**

Consumers must be educated now about proposals to initiate retail competition and they must be educated on their choices, rights and responsibilities once specific legislation has been enacted. There should be an ongoing education campaign to ensure a reliable source of information so consumers can exercise informed choices. The public interest requires that an effective consumer education campaign begin immediately.

An effective consumer education campaign will require a well developed plan and assigned responsibility for what should represent a collaborative approach among many different stakeholders. In addition, responsibility should also be assigned for the collection and dissemination of data that can be used by the consumer to make comparisons between their alternatives. This data should

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<sup>1</sup> Reference: Appendix – Public Interest Protection Report, pp. 7–10.

## **PUBLIC INTEREST PROTECTION**

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provide the consumer with the ability to make meaningful cost and service comparisons. Consumers must be able to make informed choices.

### **OPTIONS:**

The extent and methods of conducting consumer education must be determined, as well as the funding method for it. Some states are proposing a charge assessed upon all users (a sort of public benefits charge) with the funds going to a third party set up to allocate the funds and direct the efforts. Consumer education could also be funded by developing a fiscal note assigning the main responsibility to a specific agency. Initial efforts during the transition period may be constructed and funded differently than ongoing efforts.

### **RECOMMENDATIONS:**

- ◆ The Public Service Commission (Commission) should direct that the Task Force form a working group immediately to focus on the need for consumer education now. The working group should consist of representatives from all stakeholder groups and should be assigned the responsibility to develop a consumer education plan to explain the Retail Electric Competition Task Force Report.
- ◆ Once the transition to restructuring begins, the Commission should coordinate implementation of a consumer education plan using a collaborative approach with other agencies and electric utilities to address the ongoing information needs of the consumer.
- ◆ The General Assembly should require the Commission to develop rules containing minimum, verifiable, enforceable, uniform standards of disclosure that will allow consumers to easily compare items of interest such as price, price variability, contract terms and conditions, and other relevant and material factors.

## **2. CONSUMER PROTECTION<sup>2</sup>**

If consumers are to be comfortable with the new competitive environment, they must be confident that they will at least be no worse off in a restructured industry. At a minimum, existing consumer protection rules must be retained. New rules may also be needed to address the consumers' increased exposure in the competitive market. In addition, criteria for licensing providers, the privacy of consumer information, and authority for dispute resolution will have to be determined. More

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<sup>2</sup> Reference: Appendix – Public Interest Protection Report, pp. 11–15.



specific enforcement and direct penalty imposition authority may need to be granted to the Commission.

### **OPTIONS:**

#### **A. Application of rules**

While the current rules regarding customer service presently apply only to regulated electric providers, most cooperatives and municipals also follow similar guidelines. Under restructuring, it must be determined if these rules should be applied to all retail electric providers and if additional rules should be enacted.

#### **B. Licensing**

Retail electric providers of electric should be required to register with the state in order to do business within it. The requirements associated with a licensing procedure can range from a simple registration form to a fairly complex list of criteria, including codes of conduct and penalties for non-compliance.

#### **C. Privacy**

Information on items such as consumer usage presently maintained by the regulated electric distribution utility provide useful information to competitors for marketing purposes. The level of privacy and requirements for release of this information needs to be determined.

#### **D. Dispute resolution**

Responsibility for dispute resolution should be assigned to the Commission or another regulatory body.

### **RECOMMENDATIONS:**

- ◆ Require the Commission to evaluate the current consumer protection rules, strengthen and revise them where necessary and make them applicable to all REPs. A strong focus should be placed on preventing marketing abuse.
- ◆ Develop a program of licensing that will provide some assurance to the consumer of the supplier's financial stability and ability to provide quality service.

## **PUBLIC INTEREST PROTECTION**

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- ◆ Establish consumer privacy protections. State legislation permitting restructuring should protect the confidentiality of consumer billing and payment records by prohibiting the release of information without the consumers' written consent.
- ◆ Provide protection to ensure that the quality of service at the distribution level is maintained at existing levels.
- ◆ Assign responsibility for dispute resolution to the Commission and require the development of procedures to facilitate this. It will also be important to include these procedures in consumer education efforts.
- ◆ Grant specific enforcement powers to the Commission. Authority should be given to directly impose fines, penalties and to revoke licenses.

### **3. UNIVERSAL SERVICE<sup>3</sup>**

If it is deemed to be the public policy of this state to move toward retail competition, small users of electric services must be protected and assured that they will receive affordable reliable service and will have the opportunity to benefit from retail competition. Access to continuous electric service both during the transition period and after implementation is a critical issue that must be determined within the legislation on electric restructuring. There must be a requirement that there be a provider of last resort.

Some states have instituted a rate cap or reduction to be in effect to protect the consumer from significant price fluctuations during the transition to retail competition. The potential effects of these price mechanisms should be explored. Metering functions and billing operations should be evaluated independent of any market structure to determine if these responsibilities should remain under the Local Distribution Utility (LDU) or also be subject to competition. Public goods or benefits programs should be retained. These include low income assistance and weatherization programs.

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<sup>3</sup> Reference: Appendix – Public Interest Protection Report, pp. 16–21.

**OPTIONS:**

**A. Provider of last resort**

Five different options have been discussed:

- 1) The LDU would provide basic service at spot market prices to its distribution customers who do not choose an alternate provider;
- 2) All customers would receive ballots and those that do not choose would be randomly assigned to the REPS that are licensed to provide service in the market;
- 3) The LDU would act as an agent for its customers who do not choose an alternate provider. The LDU would bid for retail suppliers to serve those customers. The terms of the bidding process would be regulated by the Commission and the actual cost of electricity charged by the winning bidder would be passed through to the consumer;
- 4) The Commission or an independent entity would perform the bidding function; and
- 5) A local government would take on the responsibility of providing basic service for those of its citizens that do not choose an alternate supplier.

During the transition to direct retail access, it is probably most feasible for the LDU to have the responsibility to provide basic service.

**B. Rate reduction/cap**

Rate reductions or caps have been used in other states to offer some price stability during the transition period of electric restructuring. It must be determined if such protections are needed and could be implemented without harming the financial integrity of the distribution company.

**C. Public benefit programs**

Presently, the utilities engage in programs that are designed to assist in maintaining continuous affordable service. These programs should continue, but may need to be altered or funding provided under a competitive market. Methods of providing these programs include authorizing the Commission or another state agency the authority to establish and monitor them. Funding could be achieved through the implementation of a public benefits charge assessed to all customers.

## **PUBLIC INTEREST PROTECTION**

### **D. Metering and billing**

Under any of the market structure proposals, it must be determined who will have the responsibility to provide metering service and billing and collection services. Any of these services may continue to be provided by the LDU, during transition or thereafter, or opened up to competition. If REPs are allowed to competitively provide generation services to end-use consumers, then these same REPs may want to directly bill their customers. While the REPs will arrange for the transmission of electricity, the LDU will provide distribution services to these same end-use consumers. Rather than receiving two separate bills, one from their REP and one from their LDU, some consumers will want a single electric bill. Billing options include: 1) Allow two bills; 2) Allow the REP to bill its customers and pay the LDU for the distribution component of services provided to its customers; 3) and/or Allow the LDU to bill its customers and pay the REP for the generation and transmission components of services provided to its customers.

### **RECOMMENDATIONS:**

- ◆ If direct market access is permitted, a basic service provider should be required to serve those that do not choose an alternative REP and those with no competitive choice.
- ◆ A rate reduction or a rate cap on basic service during the transition should be explored, as long as the LDU's financial integrity is not impaired.
- ◆ A cost effective low income program should be maintained and improved. In addition, options such as percent of income payment plans, arrearage forgiveness plans and weatherization plans, possibly funded by a non-bypassable distribution charge, should be explored.
- ◆ The Commission should consider a rule allowing consumers the option of receiving a single bill for their electricity service.

### **4. COMPETITIVE ISSUES<sup>4</sup>**

Retail restructuring should proceed with caution and be completely within the control of the state. By recognizing the preeminence of *consumer choice* and *benefits*, a transition to competition will require an understanding of the complexities that accompany such a move.

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<sup>4</sup> Reference: Appendix – Public Interest Protection Report, pp. 22–24.

### **OPTIONS:**

Based upon analysis, a determination should be made of the most effective timing of restructuring implementation and whether this process should be a flash-cut approach or a phase-in.

### **RECOMMENDATIONS:**

- ◆ The introduction of retail competition should proceed only if it can be shown to benefit all classes of consumers and should be implemented consistent with this goal.
- ◆ Regulation must continue for services that are not subject to full and fair competition. The appropriate regulatory authority must manage the transition to full and fair competition by monitoring market conduct, addressing any anti-competitive practices and mitigating market power.

## **5. DISTRIBUTION SYSTEM INTEGRITY<sup>5</sup>**

Electricity is provided to consumers through an integrated network that physically ties together the generation, transmission and distribution networks. Problems with system reliability on any piece of the network often cannot be isolated to individual utility systems or to a specific consumer. Reliability difficulties on a particular part of the system can often have far reaching effects. Therefore, it is critical that every part of the network continue to be operated and maintained with an emphasis on safety and reliability. Consumers have enjoyed the benefits of a highly dependable system. It is essential under any market structure to assure that this reliability is not degraded.

The larger issue of network reliability is being addressed by the Working Group on Reliability. However, there are several concerns regarding the reliability of the distribution system under a restructured environment. These concerns are in the area of safety, quality of service and worker job loss. The level of service that consumers currently experience should be maintained or improved as a condition of deregulation.

### **RECOMMENDATIONS:**

- ◆ The appropriate regulatory authority must ensure that present safety levels are maintained.

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<sup>5</sup> Reference: Appendix – Public Interest Protection Report, pp. 25–27.



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- ◆ The quality and reliability of electric service must be maintained.
- ◆ Workers displaced due to downsizing should be offered the training required to reenter the job market.

### **6. ENVIRONMENTAL PROTECTIONS<sup>6</sup>**

In a restructured environment, consumers must be no worse off than they are under the current regulatory environment. In addition to preserving and reinforcing current environmental regulations and generation and transmission site review processes, restructuring should support energy efficiency, standard public disclosure, clean energy resources and research and development.

#### **OPTIONS:**

##### **A. Energy efficiency programs**

The future viability and effectiveness of energy efficiency programs may be left to the competitive market or they may need to be supported and encouraged because of the public good they promote.

##### **B. Standard public disclosure**

Consumers need complete and accurate information with which to make comparisons and decisions from. One thing consumers may wish to know is the generation source of the power they are considering purchasing. Should disclosure of this be required under marketing or licensing requirements?

##### **C. Research into renewables**

The development and expansion of renewable resource technologies may be left to the competitive market or may need to be supported and encouraged because of the public good they promote. This could include mechanisms such as incentives, tax credits, green power pricing and establishing minimum renewable portfolio standards for all energy providers.

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<sup>6</sup> Reference: Appendix – Public Interest Protection Report, pp. 28–32.

### **RECOMMENDATIONS:**

- ◆ Existing environmental standards must be preserved or improved and compliance with current or future standards must be ensured.
- ◆ Adequate provision for the proper closure and decommissioning of generation facilities must be ensured.
- ◆ Public benefit programs that address energy efficiency and research, development and demonstration of new technologies should be encouraged.
- ◆ The feasibility of a state funding mechanism such as a non-bypassable distribution fee for these public benefit programs should be investigated.
- ◆ Research and development should be encouraged and the feasibility of the expansion of renewable resource technology in Missouri should be explored.
- ◆ The appropriateness of the current site review process for new generation and transmission facilities should be evaluated, and modified where appropriate. At a minimum, the appropriate regulatory authorities must continue to conduct reviews of these potential sites. In addition, the public should be involved (or continue to be involved) at the beginning of the site selection process for any new generation and transmission facilities.

### **CHAPTER 4**

## **STRANDED COSTS**

### **KEY ISSUES, OPTIONS & RECOMMENDATIONS**

In general, stranded cost is the difference between the value of a utility's assets in a competitive marketplace, and their value as determined under existing regulatory procedures. Rates charged to customers today are usually based on the actual incurred costs of the utility, along with actual operating costs, all as found appropriate by the regulatory agency. If generation were subjected to competition, it is generally believed that prices could be lower than current rates, with the result that utilities could see a reduction in revenues. The term "stranded cost" has been coined to refer to this phenomena of a shortfall in revenues that would be received in a competitive market as compared to the revenues received under the existing regulatory regime. (It should be noted that existing assets will depreciate over time, and that market prices are expected to increase over time; with the result that at some future point in time the regulated charge for the assets that could be stranded will probably drop below the market prices. In theory, stranded cost is the net present value of the excess of regulated charges over market prices in the initial years, minus the excess of market price over regulated charges in the latter years.)

The fundamental issue is, if retail competition is permitted, should utilities be allowed to recover from their customers (entirely, in part, or not at all) the difference between the market price and the regulated charge? There are a variety of policy and legal arguments supporting the different positions on this issue. Pages 56 thru 66 of the report of the Stranded Cost Working Group present a detailed discussion of the pros and cons and the impacts of the various recovery policies that could be adopted.<sup>1</sup> In general, the policy decisions concerning stranded cost recovery involve arguments about equity, responsibility for decision making, financial impact, ability of consumers to realize savings, and the impact on the development of a robust competitive market.

The Task Force takes no position on the issue of overall recoverability of stranded costs associated with implementation of competition. With this background, we now outline the primary issues.

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<sup>1</sup> Reference: Appendix – Stranded Cost Report, pp. 56–66.

### 1. EXTENT OF RECOVERY OF STRANDED COSTS

The issue is the extent of recovery of stranded costs that should be allowed. In general, stranded costs that are not recovered from customers, not mitigated, or not offset by other actions will be absorbed by utility shareholders.

#### OPTIONS:

The options for treatment of stranded costs range from 100% recovery for the utilities to zero recovery. In between these extremes there are a variety of different levels of recovery and different mechanisms which can be used to achieve the allowed level of recovery. Among others, these mechanisms might include the opportunity to recover a specified percentage of identified stranded costs, an opportunity to recover a specified amount of stranded costs over a limited period of time, a reduced rate of return on the investment in the asset giving rise to stranded costs, a reduced return on equity component of the overall rate of return on the assets giving rise to stranded costs, a sharing of expenses associated with stranded obligations, a required minimum mitigation or offset to stranded costs, etc.

### 2. NEGATIVE STRANDED COSTS

It is possible that some low-cost utilities will have negative stranded costs, when the difference between market price and regulated charges for the existing generation assets is measured over the expected life of those assets. The issue becomes whether customers should receive a "negative stranded cost" offset under such circumstances.

#### OPTIONS:

For utilities expected to have negative stranded costs, the options range from letting the utilities have the full benefit of the market gains, giving the full benefit of the market gains to the consumers or sharing the difference between consumers and shareholders.

There are a number of subsidiary issues to these overall stranded cost questions. These are listed below.

### 3. CATEGORIES OF STRANDED COSTS

Many different types of generation costs may be considered to be potentially subject to stranding. Most jurisdictions making determinations in this area have included generation plant,

## **STRANDED COSTS**

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long-term purchase power and fuel contracts, and regulatory assets as allowable types of stranded costs. Less frequently, other jurisdictions have considered such items as nuclear decommissioning and public policy (social) costs. Some states have included "transition costs," or expenses incurred as a result of the implementation of competition, as amounts recoverable through a stranded cost charge mechanism.

### **OPTIONS:**

Decide what categories of costs are properly included as part of stranded cost recovery. A narrow range of categories might include generation assets, long term contracts and regulatory assets. Broader recovery of stranded costs would include other cost categories. Also, determine whether transition costs should be treated as part of overall stranded costs.

### **RECOMMENDATION:**

Stranded cost claims should encompass all categories of costs that are deemed to be appropriate sources of stranded costs. All potential sources of both positive and negative stranded costs should be considered in determining the amount of stranded cost recovery.<sup>2</sup>

## **4. STRANDED COST QUANTIFICATION METHODS**

There is no one generally accepted method in place for calculating stranded costs. Broadly speaking, the choices are either valuing stranded costs by an "administrative" method (for example, estimating changes in revenue levels or asset values for the utility due to competition) or using "market" methods (directly valuing stranded costs through sale or spin-off of assets, or renegotiation or buy-down of power contracts). Use of market methods may be hampered by utility reluctance to sell or spin-off their generating assets, or may not truly reflect market values of assets if the market mechanism is not structured properly. Administrative methods may be subject to significant estimation errors. There are also "combination" methods available for use that resemble market quantification approaches, but do not lead to a change in ownership of the asset in question.

### **OPTIONS:**

Determine an overall preference for market or administrative methods, or leave such judgments to a case-by-case analysis. If market methods are considered preferable, determine to what extent divestiture of generating assets should be mandated or encouraged through means of

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<sup>2</sup> Reference: Appendix – Stranded Cost Report, Chapter II, p. 6.



incentives. (This decision should be coordinated with an analysis of retail market power and the need to adopt mitigation measures, since divestiture of generation facilities is one means of addressing market power.) Also, decide whether nuclear facilities should be made subject to market quantification approaches. If administrative approaches are preferred, determine whether a "top down" method of stranded cost quantification based on revenues should be used, or a more detailed "bottom up" approach based on utility asset values. Finally, determine whether combination methods may present a reasonable approach to stranded cost calculation.

### **RECOMMENDATION:**

Methods of quantifying stranded costs should utilize market information to the extent possible. "Combination" methods should be seriously considered. If administrative methods are used, market information should be used to support the results of the analysis as much as possible.<sup>3</sup>

### **5. NEED FOR SUBSEQUENT REVIEW (TRUE-UP)**

This issue is related to the choice of quantification method, in that market valuations of stranded costs are not generally thought to need updating. If an initial amount of stranded costs to be collected is determined through an administrative calculation method, however, that amount may need to be revisited in the future if the initial quantification is substantially inaccurate. Proponents of periodic updates (also known as "true-ups") of the stranded cost calculation argue that there will at least initially (and perhaps for an extended period) be a high level of uncertainty regarding the actual amounts of stranded costs resulting from competition, and that true-ups are appropriate to ensure that customers do not overpay stranded costs, or utilities under collect. Opponents of true-ups hold that market participants will value the fact that their future liability for stranded costs will be known and certain more than being placed at risk for future changes in stranded cost estimates.

### **OPTIONS:**

Based on the calculation method chosen, determine whether a true-up mechanism is necessary to protect the interests of the involved parties. If so, decide how often a true-up procedure should be used, and what specific elements of the stranded cost calculation need to be updated. In addition, it should be determined whether the true-up should lead to corrections of past over- or under-collections, or only restate the stranded cost charge on an ongoing basis.

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<sup>3</sup> Reference: Appendix – Stranded Cost Report, Chapter III, p. 40.

## **STRANDED COSTS**

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### **RECOMMENDATION:**

While it would be a significant benefit to the restructuring process if any stranded cost quantification could be done once and not revisited, use of periodic true-ups to correct substantial inaccuracies in administratively determined stranded cost amounts should be strongly considered. Such true-ups should reflect, at a minimum, retroactive correction of market price estimates. Reflection of past over or under collections associated with any corrected variables should be factored into the new stranded cost rate for prospective collection from or reimbursement to customers only.<sup>4</sup>

### **6. TIMING OF RECOVERY**

Should stranded cost recovery be allowed only for a relatively brief period of time, or over a more extended period? If only a short period is contemplated, the ability of companies to fully recover these costs may be endangered, or alternatively customers may be required to pay increased rates in order to extinguish the liability within the designated time frame. If a long period of recovery is decided upon, customers may be denied the full benefits of competition for an extended period, with the electric market potentially distorted by these past "sunk" costs. Also, the choice of a start date for electric competition may impact stranded cost amounts. Delays in implementing competition (perhaps in conjunction with a rate freeze) will allow utilities with stranded costs more time to depreciate the value of their generating assets on their books, thereby reducing stranded costs. This action would also have the effect of delaying the receipt by customers of potential benefits from competition.

### **OPTIONS:**

Taking into account the impact on stranded costs, determine whether an early or late implementation date for electric competition would be appropriate. If a later start date is opted for, determine whether use of rate freezes or rate caps are reasonable for the purpose of reducing future stranded costs for utilities. Also, decide whether a relatively long or short recovery period is best for collection of stranded costs.

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<sup>4</sup> Reference: Appendix – Stranded Cost Report, Chapter III, pp. 37–38.

## **7. MITIGATION MEASURES**

"Mitigation" means reduction of stranded costs. Most commissions that have determined stranded cost policy to date have required that any stranded costs be fully mitigated before recovery is allowed. While some mitigation measures involve attempts to reduce expenses or increase revenues, other mitigation proposals are, in effect, a shifting of costs from utilities to customers, or vice versa, or from one class of customers to another.

### **OPTIONS:**

Determine whether a requirement of mitigation of stranded costs be placed on utilities prior to allowing recovery. If so, develop appropriate mitigation standards, based on specific actions utilities are directed to take to reduce stranded costs, or alternatively on establishment of overall mitigation targets, leaving the utility free to take whatever measures it deems appropriate to meet the targeted level. Determine whether and to what extent cost shifting measures are an appropriate means to mitigate stranded costs. Decide whether specific incentives should be in place to encourage utilities to mitigate stranded costs, such as retention of a portion of mitigation savings. Finally, decide whether some portion of savings achieved by utilities should be passed on to customers through rate reductions or credits, or whether such savings should be 100% devoted to stranded cost mitigation.

### **RECOMMENDATIONS:**

When stranded cost recovery claims are made, those parties requesting recovery should also present estimates of the expected mitigation of those costs. The appropriate regulatory authority should have the power to consider whether such mitigation efforts are reasonable and sufficient in determining the amount of stranded cost recovery to authorize.<sup>5</sup>

The use of incentives to encourage active mitigation efforts by utilities should be considered.<sup>6</sup>

The General Assembly or regulators should not be overly prescriptive in detailing how utilities should mitigate stranded costs. A better approach would be to establish overall ground rules for restructuring that provide adequate incentives for mitigation by utilities.<sup>7</sup>

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<sup>5</sup> Reference: Appendix – Stranded Cost Report, Chapter v, p. 49.

<sup>6</sup> Reference: Appendix – Stranded Cost Report, Chapter v, p. 49.

<sup>7</sup> Reference: Appendix – Stranded Cost Report, Chapter V, p. 49.

## **STRANDED COSTS**

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### **8. SECURITIZATION OF STRANDED COSTS**

"Securitization" is the issuance of bonds by a trust or similar entity in the amount of all or a portion of the stranded costs a utility is allowed to recover, with the utility being reimbursed for the applicable amount of its stranded costs upfront. The trust would then receive the proceeds of the allowed stranded cost recovery. Advocates of securitization assert that the interest rate on these bonds will be less than the overall cost of capital assessed on the stranded assets that would normally be charged to customers in rates, thereby saving customers money. Opponents of securitization state that the reason for the reduced interest rate is the fact that securitization in effect represents a significant transfer of risk of collecting stranded costs from shareholders to customers. (Truing up stranded cost recovery in order to correct misestimates of such items as the market price of electricity is not possible under a securitization procedure.) Receipt of stranded cost amounts upfront by utilities through utilization of securitization is also alleged to have possible detrimental market power impacts.

#### **OPTIONS:**

Authorization by the General Assembly is necessary if securitization is to be an available option for mitigation of stranded costs. If legislative approval is received, decisions must be made as to what level of securitization of stranded costs for a given utility is prudent (in light of the true-up concerns), and whether securitization presents any market power concerns. If so, are there are means readily available to mitigate market power concerns associated with use of securitization?

#### **RECOMMENDATION:**

The General Assembly and regulators should approach the concept of securitization carefully. Options for its possible use should be preserved.<sup>8</sup>

### **9. COLLECTION METHOD**

A decision is necessary as to the mechanism for collecting stranded costs, and what customer classes should be charged and in what amount. Should departing customers be targeted for these costs, the remaining body of customers, or both groups? Among other alternatives, it is possible to make the distribution utility responsible for collecting stranded costs, to levy stranded costs on new suppliers seeking to serve existing monopoly utility customers, or to have stranded costs collected

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<sup>8</sup> Reference: Appendix, Stranded Cost Report, Chapter VI, p. 55.

by the government in the form of taxes. (If the latter option is selected, stranded cost recovery will not be targeted exclusively to customers of utilities with stranded costs.) Should costs be assigned to customer classes in proportion to their current responsibility for generation costs or on some other basis? Should stranded cost collections be assessed on customers via a flat charge, or by a volumetric fee? Should they be charged to customers on the basis of their past historic usage, or according to current usage patterns? (For example, should stranded cost charges be placed on customers choosing to self generate, both before and after the start of retail access?) Is it permissible to shift cost responsibility for generation costs between customer classes through stranded cost collection?

### OPTIONS:

A choice of agent for collection needs to be made (utility vs. government). If the utility is assumed to be responsible for collection, the fundamental choice is between the mechanism of an exit fee (targeting departing customers) and a wires charge (targeting all customers using a utility's distribution system.) Then, determinations of the questions of allocations among customer classes and rate mechanisms such as flat charges vs. usage sensitive charges, and responsibility for stranded costs by self generating or cogenerating customers also need to be made.

### RECOMMENDATION:

It is appropriate that any charges or credits be confined to the customers of each individual utility. Spreading these charges or credits across the customers of other utilities would not be appropriate.<sup>9</sup>

## **10. EARLY RECOVERY OF STRANDED COSTS**

If a utility is thought to be likely to have stranded costs once the electric market is opened to competition, should the company be allowed to in effect collect stranded costs in rates from customers prior to the start of retail access? The normal approach to achieving early recovery of stranded costs is to accelerate depreciation/amortization of generating assets on the utility's books in lieu of reducing customer rates currently. The parties supporting early recovery claim this approach will minimize the stranded cost burden on customers, utilities and the electric market once competition is implemented. Those opposing early recovery state that this would front load additional costs on customers who will not be guaranteed benefits from competition, and will grant premature recovery to utilities who may in fact have little or no actual stranded costs once competition does start.

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<sup>9</sup> Reference: Appendix, Stranded Cost Report, Chapter IX, p. 67.



## **STRANDED COSTS**

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### **OPTIONS:**

Determine whether early recovery of stranded costs is an appropriate policy option, and if so, in what circumstances. One option would be for utilities to have greater freedom to accelerate recovery on their books of generating assets. Any action along that line should continue to be balanced by the ongoing objective that ratepayers receiving monopoly service pay rates that do not exceed a "just and reasonable" level. If early recovery is allowed, decide whether other general stranded cost policy determinations need to be made before such recovery is allowed.

### **RECOMMENDATION:**

Rates should not be increased to allow for early recovery of stranded costs. However, the appropriate regulatory authority should have the power to consider, in advance of competition, strategies that do not require rate increases.<sup>10</sup>

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<sup>10</sup> Reference: Appendix – Stranded Cost Report, Chapter V, pp. 49–50.

## CHAPTER 5

### LEGAL

## ISSUES, OPTIONS AND RECOMMENDATIONS

### STATE AND LOCAL TAX ISSUES

#### RECOMMENDED TAX REFORM PRINCIPLES

To the extent that the competitive supply of generation results in tax reform related to state and local taxes, the Task Force supports the application of the following tax reform principles, to the extent feasible, when considering the topics discussed below.

- Level Playing Field: the General Assembly should seek equal tax treatment of competing energy suppliers in a restructured electricity market.
- Revenue Neutrality: the General Assembly should seek to maintain revenue opportunities for state and local governments so they are not harmed by electric industry restructuring.
- Customer Tax Burdens: any modifications to the tax laws should be structured to minimize the shifting of tax burdens among customer classes or among customers within a particular class.
- Collectibility: any modification to the tax laws should be structured to maximize the ability of state and local governments to collect them.
- Compliance: compliance requirements on taxpayers and local governments should be minimized.
- Interstate Competitiveness: the state and local tax system should be structured to enhance the competitiveness of Missouri businesses.
- Avoidance of Litigation: the General Assembly should seek to design tax legislation that is unlikely to be subject to court challenges in order to avoid potentially significant tax refunds and delays in obtaining certainty in tax treatment.

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### **1. MUNICIPAL GROSS RECEIPTS TAXES, FEES AND "PILOTS"**

Gross receipts taxes, fees and payments in lieu of tax ("PILOTS") are determined as a percentage of the seller's gross receipts from retail sales of electricity within the city. The revenues from these taxes and fees comprise a major source of funds for local government. These taxes and fees can appear in three forms.

- A. Municipal business license taxes – are applied to investor owned and cooperative electric utilities and are determined as a percentage of the seller's gross receipts from retail sales of electricity within the city.
- B. Municipal franchise fees – are applied to investor owned and cooperative electric utilities and are determined as a percentage of the utility's gross receipts from retail sales of electricity within the city.
- C. Payments in Lieu of Taxes (PILOTS) – applied to government owned utilities to provide municipal government with revenues equivalent to business license taxes or franchise fees.

#### **ISSUE:**

Under current state law and local ordinances, if nonlocal electricity suppliers are allowed to sell electricity to Missouri consumers, those nonlocal electricity suppliers will not be required to pay municipal business license taxes or franchise fees.

#### **OPTIONS:**

- 1. Repeal the existing taxes and impose replacement taxes.
  - a. The General Assembly could enact a state law authorizing municipalities to impose the replacement taxes after Hancock votes.
  - b. Amend the constitution to authorize municipalities to impose the replacement taxes.
- 2. Retain existing gross receipts taxes and make up the tax revenue shortfall by:
  - a. imposing a compensating tax which would be on retail sales that are not taxed by the existing taxes and fees; or

- b. make as a condition of certification that nonlocal suppliers agree to pay gross receipt taxes; or
  - c. make as a condition of certification that nonlocal suppliers maintain a place of business in Missouri; or
  - d. make as a condition of certification that nonlocal suppliers install and own meters at the premises of all of their retail electric customers; or
  - e. charge suppliers a state registration fee for the privilege of selling electricity in Missouri; or
  - f. increase other taxes to make up for the short fall.
3. Permit municipalities to charge rental fees to local distribution companies for the privilege of using public rights of way for their wires, in lieu of business license taxes and franchise fees. The rental fee would be based on a combination of volumetric and purchase price factors, and collected by the local distribution company through rates to its customers.

### **CONSTITUTIONAL LIMITATIONS:**

Two of the major constitutional considerations related to the setting and collection of gross receipts taxes under the assumption of competitive supply of generation of electricity are:

1. Missouri Constitution, Article X, sections 18 and 22 (part of the "Hancock Amendment"): Section 22 requires that any new tax or any increase in an existing tax by a local government or political subdivision be approved by a majority vote. In addition, local government cannot broaden the base of an existing tax unless the rate is reduced to yield the same estimated gross revenues as in the prior base. For this purpose, taxes do not include PILOTs or franchise fees that are in the nature of rental for the use of rights-of-way. Section 18 imposes an annual state revenue limitation that must be considered in connection with proposals to enact a state replacement tax for local gross receipts taxes and fees, the revenues of which would be distributed locally.
2. Federal-Commerce Clause (Nexus): A taxpayer (or tax collector) must have a "nexus" (i.e., connection) with the taxing jurisdiction that is sufficient for it to be forced to pay taxes (or be forced to collect taxes).

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### **RECOMMENDATIONS:**

The Task Force recommends that changes in tax laws take place prior to and in anticipation of competitive supply of generation, if the General Assembly chooses to permit direct retail access for consumers. The Task Force supports permitting municipalities the discretion to repeal or modify existing gross receipts taxes and establish a new system of taxes that meets the tax reform principles set out in section A.

## **2. PROPERTY TAXES**

Property taxes are imposed upon owners of property and based on a percentage of the value property. Investor-owned utility real and tangible property held for purposes of generation and distribution of electricity is subject to central assessment by the State Tax Commission. Such property is primarily valued using the unit method of valuation with emphasis given to the income approach. These centrally assessed values are distributed to all counties and political subdivisions based on a wire mileage formula. All property of cooperative utilities and cogeneration facilities is locally assessed. Property owned by municipal utilities is not subject to property tax (Article 10, Missouri Constitution).

### **ISSUES:**

If municipal and cooperative generation is allowed or required to compete in a competitive market for generation supply (or if independent power producers or stand-alone generating companies have in-state generation facilities), then the application of and methods for assessing property taxes would be different from those applied to the investor-owned utilities. For investor-owned utilities, moving to competitive supply of generation may:

- affect the value of electric generation property, and therefore affect the amount of property tax collected;
- affect the ownership of generation property, and therefore affect the amount of property tax subject to central assessment; and
- affect the generation property which is subject to local assessment, and therefore shift tax revenues among local government entities and political subdivision as well as the tax rates within jurisdictions.



**OPTIONS:**

1. Eliminate unit valuation for generation assets in favor of local assessment;
2. Adopt uniform unit valuation for all generation assets regardless of ownership;
3. Eliminate unit valuation for generation assets, but employ the State Tax Commission to value all generation assets, regardless of their ownership; and
4. Repeal the property tax on electric generation property and enact a replacement tax.

**RECOMMENDATIONS:**

The Task Force does not have a specific recommendation regarding the above four options. However, the Task Force does recommend that the General Assembly implement changes in the property tax laws that conform to the tax reform principles set out in section A.

**3. SALES AND USE TAXES**

State and local sales taxes are imposed upon retail consumers' nondomestic purchases of electricity and are determined as a percentage of sales price. These taxes are collected by the utility and remitted to the state or local city. Local governments may impose a local sales tax on domestic electricity use. A compensating use tax would be imposed by the state and by some localities for sales of electricity from out-of-state sources.

**ISSUES:**

- If competitive supply of generation results in some Missouri end-use consumers being able to purchase electricity from out-of-state electricity suppliers, current use taxes would apply to those purchases. While the use taxes would apply, there are potential difficulties with the collection of use taxes from either the end-use consumer or the out-of-state supplier.
- For local sales tax, if the local government does not have a use tax provision, there would be a loss in tax revenues from nonlocal supply of generation. Even with a use tax provision, collection of the use tax may be difficult because of the problems associated with self-assessment.

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- If the location of the electricity sale changes from the end-use consumer's meter to the seller's place of business, there would be a shift of tax revenues among jurisdictions.

### **OPTIONS:**

1. Repeal the sales/use tax on electricity and enact a replacement tax;
2. Require disclosure of sufficient information to the Missouri Department of Revenue to enable it to collect applicable use taxes; or
3. Remove authorization for localities to tax domestic uses and enact a replacement tax.

### **RECOMMENDATIONS:**

The Task Force does not have a specific recommendation regarding the above three options. However, the Task Force does recommend that the General Assembly implement changes in the sales and use tax laws that conform to the tax reform principles set out in section A.

## **LEGAL IMPEDIMENTS TO RESTRUCTURING**

In this section, the Task Force has identified legal impediments to electric industry restructuring that either require changes in legal definitions or other statutory changes to Missouri law, as well as other issues that may be addressed through judicial construction of existing statutes in a manner that would permit electric competition. An "impediment" as discussed below is generally defined as being a specific aspect of state law that, in its present form, might be construed to prevent or frustrate the implementation of retail electric competition in Missouri. A detailed discussion of the particular laws referenced in this section can be found in the Task Force Legal Committee's report, which is contained in the Appendix to this report.

### **1. STATUTORY OPERATIONAL LIMITATIONS**

Missouri statutes permit three broadly defined types of entities to engage in the business of supplying electric energy at retail: 1) electrical corporations under Chapter 386, Revised Statutes of Missouri (RSMo); 2) rural electric cooperatives under Chapter 394 RSMo; and 3) municipal-owned utilities under Chapter 91 and various other sections throughout the Revised Statutes.

**ISSUE:**

Without statutory changes, new entities that would develop in a competitive retail market would have to fit within the three present statutory forms in order to operate in the state.

**OPTION:**

Provide broader statutory descriptions of existing entities or define new entities, or both.

**RECOMMENDATION:**

The Task Force recommends that under any restructuring model, the General Assembly should review state statutes and revise them, as necessary, to provide for market entrants appropriate to that model.

**2. STATUTORY ASSUMPTION OF INTEGRATION**

Missouri statutes contemplate the supply of electricity as an integrated enterprise consisting of all facets of the electric business from generation to distribution and every function in between. Each of the chapters of the Missouri statutes that regulate a segment of the electric industry in Missouri assume an integrated electric supply enterprise. Accordingly, the language describing the authority of each type of entity provides for operating electric light and power plants (presumably including transmission and distribution facilities), or being an electric supplier (presumably encompassing generation through final distribution and metering).

**ISSUE:**

With an unchanged statutory structure, providers of competitive services will be faced with rules designed for the historic operational environment and not for an environment intended to increase competition in the provision of those services.

**OPTION:**

Review the specific statutes and amend or repeal to accommodate changes, as needed. One approach would be to redefine the service of electricity into its functional components (e.g., generation, transmission, distribution, metering, etc.).

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### **RECOMMENDATION:**

The Task Force recommends that the General Assembly review state statutes and revise them, as necessary, to address this issue.

### **3. ANTI-SWITCH ("FLIP-FLOP") LAWS**

Sections 393.106 RSMo (relating to investor-owned utilities), 394.315 RSMo (relating to electric cooperatives) and 91.025 RSMo (relating to municipal systems) restrict electric customers from switching between suppliers to get a better rate.

### **ISSUE:**

When an investor-owned utility (IOU), cooperative or municipal electric utility provides "retail electric energy" to a structure through permanent facilities, it has the right to continue to do so, and third-party suppliers are denied the "right" to service that structure. If restructuring provides for direct retail access for consumers, alternate electric suppliers may not be able to provide service to customers desiring to buy service from someone other than the incumbent provider.

### **OPTIONS:**

1. Revise the pertinent statutes to define "supplier" so that it is not limited to the incumbent electric utility.
2. Remove the term "supplier" from the statutes and rewrite the sections to focus the statutory restriction on a change in the delivery facility (i.e., the "wires," transmission and distribution), thus removing from restriction generation (i.e., energy and capacity).

### **RECOMMENDATION:**

The Task Force makes no recommendation concerning a particular option, but suggests that the General Assembly review these statutes and revise them, as necessary, when addressing retail competition.

#### **4. MISSOURI PUBLIC SERVICE COMMISSION JURISDICTION**

All public utilities in Missouri are subject to the jurisdiction, control and regulation of the Missouri Public Service Commission. Section 386.020(42) RSMo. The term "public utility" includes every "electrical corporation" defined in Section 386.020(15) RSMo. An electrical corporation by definition includes the management of an "electric plant," which is defined in Section 386.020(14) RSMo.

##### **ISSUE:**

The current level of utility regulation for every such entity defined above may be an impediment to retail competition. However, some regulation of new entities may be needed in a restructured environment.

##### **OPTIONS:**

1. Create exceptions to the above definitions so that it would be possible for an entity, with or without its own generating facilities, to use, operate, control or own transmission and distribution assets for the sale of electricity in Missouri, without related generating facilities or the output of related generating facilities being subject to public utility regulation.
2. Create a definition of "competitive retail electricity provider" to include entities selling energy or capacity to consumers (subject to some regulation by the Commission such as licensing and the filing of financial documents) would remove the impediments created by the present definitions.

##### **RECOMMENDATION:**

The Task Force recommends that the General Assembly review and address, as necessary, the definitional issues noted above, including the appropriate scope of regulatory review for the Public Service Commission and local regulatory entities, as a part of industry restructuring.

#### **5. TERRITORIAL AGREEMENTS AND RESTRICTIONS**

Current statutes set geographic service ground rules for each segment of the electric industry (investor owned utilities, municipal utilities and rural electric cooperatives). Sections 393.170 RSMo, 386.800 RSMo and 394.080 RSMo. Municipally owned utilities generally are limited to their city limits. Rural electric cooperatives can serve "rural areas," which are defined broadly as "any area



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not within the boundaries of a city, town or village with a population in excess of 1,500 inhabitants." Electrical corporations may serve under Public Service Commission granted "certificates of convenience and necessity," which establish a geographic area or a line basis.

Current law (section 394.312 RSMo) provides for written territorial agreements between rural electric cooperatives, electrical corporations and municipally owned utilities under which the boundaries of the electric service area of each electric service supplier are designated. In addition, although rural electric cooperatives are permitted under certain conditions to provide electric service to non-rural areas, they are limited by law to serving their members, governmental entities and others, not exceeding ten percent of their membership.

### **ISSUE:**

If retail competition is authorized, territorial boundaries for competitive services will need to be adjusted or eliminated to accommodate existing and new competitors if a realistic competitive market is to develop. Also, as with the anti-flip-flop statutes, the term "supplier" is not defined.

### **OPTION:**

The statutory provisions dealing with territorial boundaries and restrictions will require review if some services (e.g., generation or metering) become competitive. Creating a broad definition for "supplier" would clarify the applicability of the territorial agreement law to new providers of energy or capacity who will be delivering electricity through existing transmission and distribution facilities owned by incumbent utilities. The General Assembly could also amend existing statutes with respect to territorial boundaries so that they do not apply to competitive services.

### **RECOMMENDATION:**

The Task Force recommends that the General Assembly review and amend existing laws in this area, as necessary, so as not to restrict territorially competitive services that are now regulated.

## **6. OTHER "IMPEDIMENT" LAWS**

The Section 386.020(15) RSMo definition of "electrical corporation" subjects to the jurisdiction of the Missouri Public Service Commission any entity which owns, operates, controls or manages any electric plant and holds itself out to sell electricity to the public. This definition may encompass not only "traditional" utilities but also other entities that seek to sell or market power in the state.

Article VI, Section 27 of the Missouri Constitution contains language which states:

. . . No such joint board, commission, officer or officers established by a joint contract, or any joint venture or cooperative action or undertaking of any kind or character shall purchase, construct, extend or improve any revenue producing water, gas or electric light works, heating or power plant unless and until such joint boards, commissions, officer or officers, or any joint venture or cooperative action and all utility operations conducted by any joint board, commission, officer or officers are fully regulated in all respects as a public utility. (emphasis added)

**ISSUE:**

New market entities, if they can be defined as "electric corporations," may be required, among other things, to obtain Commission approval to provide service and authority to finance.

**OPTION:**

Redefine "electric corporations" to allow for regulation in a manner consistent with competition.

**RECOMMENDATION:**

The Task Force recommends that the General Assembly clarify the appropriate regulatory role of the Public Service Commission with respect to new entrants in a restructured industry.

**7. ISO STRUCTURE AND STATE LAW**

There are no general impediments in existing state law to the implementation of an Independent System Operator ("ISO").<sup>1</sup> A delegation of operational authority, i.e., control/management, to an ISO by the participant utilities would mean that definitional sections "electric plant" and "electrical corporation" and section 393.190 RSMo would apply. Should the

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<sup>1</sup> The term has also occasionally been used to denominate an "independent services organization," but that term connotes a different function than that referenced here. Although an ISO could potentially assume several forms, the anticipated structure, marked out by FERC in its relevant orders, suggests that an ISO might own some limited property, but would not own utility plant, even if such plant were constructed at the direction of the ISO governing authority.

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structure of the ISO be such that the organization might in fact own "electric plant," there could be potential implications under those statutes that would need modification.

### **8. OTHER STATUTORY ISSUES**

#### **A. SUNSHINE LAWS**

The so-called "Sunshine Law" may have some implications for municipal utilities and their customers. In very general terms, these statutes require that records relating to the operation of the municipal utility be publicly available.

#### **ISSUE:**

Some municipalities believe that this law places them at a disadvantage in that information regarding the competitive portion of their utility services becomes public.

#### **OPTIONS:**

1. Provide that information disclosure laws apply equally to all businesses providing competitive utility services within the state.
2. Exempt all municipalities from the Sunshine Law with respect to the competitive portion of their utility operations.

#### **RECOMMENDATION:**

The Task Force recommends that municipal utilities participating in a competitive retail market have the same information disclosure and open meeting requirements as other entities providing comparable competitive services; provided, however, that those municipal utilities should open records for public review when they are no longer commercially sensitive.

#### **B. PROPOSITION 1**

#### **ISSUES:**

There is a question of whether "stranded investment" resulting from retail competition must be removed from a utility's rate base, meaning that the cost is not recoverable in rates. Section 393.135 RSMo, often referred to as "Proposition 1" or the "used and useful statute," states as follows:

Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or any other cost associated with owning, operating, maintaining, or financing any property before it is fully operational and used for service, is unjust and unreasonable, and is prohibited.

**OPTION:**

Revise this statute to clarify its application to "stranded cost" recovery.

**RECOMMENDATION:**

The Task Force makes no recommendation on this subject.

**C. EMINENT DOMAIN LAWS**

"Level playing field" issues arise when some market participants have rights that could result in unequal competitive positions. In a competitive marketplace, private utilities arguably may have broader rights to acquire private property for public use than do municipals and cooperatives. Sections 523.010 RSMo, 394.080 RSMo and 71.525 RSMo.

**ISSUES:**

1. While municipal and cooperative utilities have similar rights within their service territories, they may not have rights as broad as those of private utilities once those limits are crossed.
2. Eminent domain may also be a concern for private power suppliers who desire to locate a generating plant in the state.

**OPTION:**

1. Withdraw eminent domain authority from all market participants.
2. Grant all entities equivalent authority.
3. Require approval for condemnation authority from the Public Service Commission or some other governmental authority on a case by case basis.

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### **RECOMMENDATION:**

The Task Force does not have a recommendation on a particular option, but suggests that the General Assembly review this issue when considering industry restructuring.

## CHAPTER 6

### RELIABILITY

#### ISSUES, RECOMMENDATIONS AND CONCLUSIONS

##### CONCLUSIONS:

1. Because electricity is essential to the health and welfare of our citizen consumers and the economic well being of our state, there must be a sufficient and reliable supply of electricity at a reasonable price.
2. The safety, reliability, quality, and sustainability of electric service should be maintained or improved in a restructured electric industry.
3. No changes in the electric industry or the regulatory regime should be allowed to compromise safety or reliability, even if the intention is to lower consumer prices, except where a lower level of reliability is freely chosen by a customer and does not impair service to other customers.
4. Any of the three market structures analyzed by the Market Structure/Market Power Working Group can be implemented without sacrificing safety or reliability, if it occurs through a carefully managed transition process that allows technical and administrative requirements to be developed and installed.
5. Any industry structure adopted to permit retail access must adequately address measures to maintain safe and reliable operation while ensuring equitable treatment of all customers and market participants.

##### ISSUE A. LOAD FORECASTING FOR PLANNING

Load forecasting is the process of estimating the future demands that will need to be supported by generation, transmission and distribution facilities. Forecasts of both peak load and hourly energy usage are required to determine the size and type of facilities that should be installed.

Without proper price signals to developers of new generation facilities, there can be no assurance that adequate generation capacity will be installed to maintain the reliability of the system. Without adequate load forecasts, coordination of planning and maintenance of transmission and



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distribution systems will be impossible. In addition, unless the market prices can reflect future variations in near-term demand and supply balance, the market will not be able to send the proper price signals for generators to schedule their maintenance in a manner that will ensure adequate operable generation supplies.

### **RECOMMENDATIONS:**

- Planned generating capacity additions and retirements should be provided to the Independent System Operator (ISO).
- The ISO should develop a ten-year forecast of load and generating capacity.
- The ISO forecast should be made public.

### **ISSUE B. GENERATION PLANNING**

Generation planning is the process of developing the most efficient plan for acquiring generation capacity to ensure that adequate electric supplies are available to meet future demand.

Utilities are required to plan for installed generation reserves above and beyond the level of forecasted peak demand. This installed generation reserve requirement, which is typically 13–18% above forecasted peak demand, is designed to ensure that adequate generation is available in future years to meet the demand of their customers.

Under competition no entity will be obligated to construct new generation facilities. Generation owners and developers will make decisions in regard to retiring existing generation facilities or constructing new generation facilities based on the current and forecasted market price for capacity and energy. Forecasts of future market prices will be based on the perceived future balance of supply and demand and must consider customer response to market prices.

In an ideal market, supply and demand always achieve equilibrium at the market clearing price. In the practical world of generation markets, this equilibrium could be unattainable or at least yield an unacceptably high market clearing price for electric consumers. First, consumer demand may not be fully responsive to short-term market prices. Second, generation cannot be constructed "overnight." Typically it takes two to five years from inception to commercial operation of a new generation facility; therefore, if generation is needed in future years, the forecast for market prices for two or more years into the future must reflect that need in order for developers to construct new facilities in time to meet demand. If there is insufficient time to construct new facilities, the market may exhibit very high spot market prices. If there are not enough voluntary interruptions, the premium prices consumers might have to pay during peak hours may be unacceptable to society. In the worst case, additional capacity may not be available at any price and load shedding, brown outs

or rotating black outs may be required to maintain the integrity of the system. These involuntary interruptions of service may also be unacceptable to society, especially since high premiums and involuntary service interruptions could be avoided in most cases under traditional regulated utility generation planning.

### **RECOMMENDATION:**

It must be recognized that reducing or eliminating current reserve capacity requirements creates additional risks in providing reliable service.

From the standpoint of those who are currently charged with assuring reliable service, continuing existing reserve capacity requirements makes sense. From the standpoint of new, competitive REPs, and perhaps of customers willing to accept some reliability risk because of expected cost savings, reserve capacity requirements should be eliminated in favor of contractual enforcement mechanisms such as monetary penalties for non-performance.

Existing generating capacity reserve requirements have been self-policed by utilities acting through their regional reliability councils (power pools). In a competitive environment, state regulators should be given authority to certify (and decertify) REPs using a variety of criteria. From a reliability standpoint, the criteria should include a demonstrated ability to operate and maintain any owned generating capacity, the ability to continuously deliver any offered service for the full term the service is offered, and the ability to shoulder reasonable levels of unanticipated costs while remaining solvent.

### **ISSUE C. SHORT-TERM LOAD FORECASTING**

Short-term load forecasting is a prediction of hourly electric demand within a control area for the purpose of ensuring that adequate generation resources are available to meet control area demand and required reserves.

Unless there are severe penalties for under scheduling or failure to supply as scheduled, there may be, at times, an incentive to under schedule energy deliveries. This could result in a failure to commit sufficient generating capacity to supply load and a failure to arrange for sufficient operating reserves.

### **RECOMMENDATION:**

The control area should continue to prepare a forecast for unit commitment, independent of the REP aggregated forecasts.

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### **ISSUE D. CAPACITY REQUIREMENT FOR SERVICE TO FIRM LOAD**

In a restructured environment, the generation capacity in a control area is no longer dedicated to serve the control area's firm load.

The essential issue in regard to short-term generation planning is whether or not any entity, and if so, which entity should be responsible for securing generating capacity resources for service to firm load.

Capacity resources can be distinguished from the energy delivery in that capacity resources are dedicated under contract to give "first-call" rights to the customer or REP purchasing them.

#### **RECOMMENDATION:**

Customers, or their REPs, should acquire the necessary capacity resources to meet their firm load obligations and provide their lists of capacity resources and load to the control area in advance of the delivery period.

As the marketplace continues to develop, reliability rules may change and the interconnected system may develop new methods of maintaining reliable service that do not necessitate an explicit generating capacity requirement. At such time, rules and procedures should be reviewed and modified to reflect changing conditions, so long as reliability is preserved in an equitable manner.

### **ISSUE E. UNIT COMMITMENT FOR RELIABILITY**

The process of determining which generators should be operated each day to meet the daily demand profile of a control area.

Unit commitment for reliability may not be the same as unit commitment for economics, particularly if there are load pockets or other transmission constraints.

#### **RECOMMENDATION:**

The control area operator must be responsible for unit commitment for reliability, which may differ from resources designated for economics. The control area should review and verify on a daily basis the designated supply resources and ensure that sufficient generating units are on-line and available to meet the load and required reserves. The control area operator will need to ensure that specific must-run generation is on-line for transmission system reliability reasons including load pocket concerns.

**ISSUE F. RATING OF GENERATING UNITS**

Rating of Generating Units is the process of determining for each generating unit its dependable generating capability. The dependable generating capability is the power output achievable for a specified period with all equipment in service under average operating conditions.

If suppliers overstate their generating capability, generation may not be adequate to meet the load and required reserves.

**RECOMMENDATION:**

Generation suppliers must rate their units in accordance with the North-American Electric Reliability Council (NERC) and regional council guides (or uniform rating criteria established by a successor). In addition, a procedure may need to be developed to verify generating unit ratings. (Note: If an ISO is established and it receives telemetered data from generators within the ISO, this problem would be reduced in magnitude.)

**ISSUE G. GENERATOR MAINTENANCE**

Generating units must be periodically removed from service to repair, replace, add, or upgrade equipment, or to perform scheduled preventative maintenance in order to ensure reliable performance in the future. Units may also experience full or partial outages on an unplanned, or forced, basis.

Generation suppliers may schedule maintenance when they expect the price for power to be low, resulting in inadequate generation to meet load and reserves.

There is also a concern that economics may dictate generator maintenance to a degree that outages are too infrequent to maintain acceptable reliability levels long-term.

**RECOMMENDATION:**

Coordination is required to ensure generation and transmission reliability. Generation suppliers will need to submit generation maintenance schedules to the ISO or control area. Procedures should be developed to arrange for sufficient generation resources to be kept available, in the event reliability is determined to be inadequate based on the existing maintenance schedules.

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### ISSUE H. CONTROL AREA ANCILLARY SERVICES

Control area ancillary services are those services, in addition to basic transmission and generation supply services, which are necessary to deliver electrical service to consumers and to maintain reliable operations of the interconnected generation and transmission system. These services consist of: a) scheduling, system control and dispatch service, b) reactive supply and voltage control service, c) regulation service, d) frequency control service, e) energy imbalance service, and f) operating reserve service, both spinning and non-spinning.

**Scheduling, system control and dispatch services** are the activities carried out by a control area to identify, confirm with other control areas and implement in the control area energy management computer system the interchange schedules of power between control areas, thus ensuring operational consistency and security.

**Reactive supply and voltage control services** are the provision of reactive power output from generators to maintain transmission line voltages. The line voltages and reactive power outputs are continuously monitored and adjusted to maintain voltage within specified tolerances. Transmission system elements such as capacitor banks can also be used to control voltage levels.

**Regulation service** is the generating capability to respond to moment-by-moment variations in the demand or supply in a control area. The amount of regulating capability required for each control area is determined by the regional reliability council based on the historical fluctuation in a control area's load. Each control area's regulating performance is measured continuously and reported monthly to the council.

**Frequency control service** is the ability to detect and respond to instantaneous variations in interconnected system frequency. It is closely related to regulating capability in that sufficient generating resources must be on-line, but not fully loaded, to respond to moment-by-moment changes on the system.

**Energy imbalance service** is the hourly provision of energy to correct mismatches between a customer's generation supply resources and the customer's load being served.

**Operating reserves** are additional generating capacity, which is available over and above the generating capacity needed to supply load, in order for the system to withstand real-time contingencies. Operating reserve includes both spinning reserve (capacity from generators which are already on-line but loaded to less than their maximum output) and supplemental reserve (capacity from generators which can be brought to service in ten minutes or less). The amount of operating reserve to be maintained by each control area is determined by the regional reliability council, typically based on the size of the largest generating unit or resource on-line in the council.



**RECOMMENDATION:**

Control area ancillary services are essential elements of maintaining reliable electric service. Under any market structure, these services must continue to be provided.

**ISSUE I. TRANSMISSION PLANNING**

Transmission planning is the process of developing the most efficient set of transmission facilities to meet future demand.

Today's transmission system was designed and built to connect a utility's load to its generators in order to take advantage of the economies of scale in large central station generation facilities. Interconnections with other utilities' transmission systems were made to improve reliability (share generating reserves) and to provide an opportunity to exchange limited quantities of power on an economy basis.

Today utilities analyze the transmission system in regard to the adequacy of its facilities to meet the forecasted demand of its long-term bundled and unbundled transmission customers out to ten years into the future. Adequacy is determined by performing computer simulations to evaluate whether the transmission system can continue to service firm transmission customers following plausible system contingencies. To the extent it is determined that the transmission system is not adequate, new transmission facilities are proposed. Alternatively, utilities may propose new generation facilities in lieu of new transmission facilities. This latter choice is commonly made in areas of a utility's system where new transmission facilities cannot successfully be sited or are cost prohibitive.

In addition to the long-term transmission planning, utilities also conduct short-term transmission planning. Utilities schedule generation and transmission maintenance based on their short-term transmission planning. In addition, utilities perform short-term transmission planning to determine transmission adequacy for extended forced outages of generation and transmission facilities.

The transmission system has become much more heavily utilized as a result of open access at the wholesale level. Heavier loading of the transmission system can reduce reliability and additional investments may be required to maintain the current level of reliability.



## **RELIABILITY**

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Areas of the transmission system where a substantial part of the load must be served from local generation are often referred to as load pockets. Load pockets are a market power concern, and thus may also make transmission planning much more difficult.

Of particular concern is the need for must-run generation in those locations with load pockets that are inadequately served by network transmission facilities. In a competitive market, there may be no incentive to site and operate generation within the load pocket, yet it is necessary to ensure that reliable local generation remains available to supply the pocket.

### **RECOMMENDATION:**

The ISO should identify all load pockets and other system constraints on its transmission system along with the generation that must run in some hours of the year either to ensure adequate power is delivered to consumers in that load pocket or to relieve the transmission constraint. Generation that must run for reliability should be placed under contract with the ISO for that portion of its output that is necessary to assure adequate delivery to consumers in the load pocket or maintain system reliability. Because many load pockets exist due to the inability to site new transmission facilities or because such facilities are cost-prohibitive, the ISO should have the right to issue a request for proposal (RFP) for new must-run generation in lieu of constructing new transmission capacity.

### **ISSUE J. TRANSMISSION OPERATING STUDIES**

Transmission operating studies are used to model the system's ability to stay within safe loading limits on facilities and to determine available transfer capability for further commercial use of the transmission system above committed uses.

Generation suppliers may be reluctant to provide data to other entities due to the possible commercial value of such data. It may also be difficult to predict the generating unit loadings in a competitive market.

### **RECOMMENDATION:**

Generation supply sources must be established sufficiently in advance of the necessary study periods to provide adequate generator loading data to the regional councils and control areas as a condition of obtaining access to transmission.

**ISSUE K. TRANSMISSION CONSTRUCTION AND MAINTENANCE COORDINATION**

Transmission lines and equipment are routinely constructed and/or maintained, requiring outages on both a planned and unplanned basis. Coordination is required with affected entities to ensure both safety and reliability.

If different entities control the transmission system and the generating units, there could exist a lack of coordination in maintenance scheduling. Further, individual entities could schedule maintenance to enhance their market power.

**RECOMMENDATION:**

Require entities responsible for transmission system maintenance and entities controlling the generators to report their maintenance plans to the ISO or regional reliability councils in sufficient time to study the impact of the plans and, if necessary, seek modifications.

**ISSUE L. DISTRIBUTION PLANNING**

Distribution Planning involves planning for the local electric distribution system. The distribution system is typically comprised of distribution substations and all facilities emanating from there to end users. The "exact" transition point and voltage distinction between distribution and transmission can vary, but should be clearly defined in a restructured industry in order to clarify rates/responsibility.

The Local Distribution Utility (LDU) may be reluctant to expand the distribution system because there is no longer the financial incentive of revenues from energy sales.

**RECOMMENDATION:**

With functional unbundling, it will be important to clearly define the distinction between "transmission" and "distribution" facilities. In this regard, the interfaces and roles of the transmission planning entity, e.g., independent system operator, and other entities, e.g., regional reliability councils and security centers, with respect to overall system reliability and planning should be delineated.

If an entity other than the LDU is to be responsible for end-user metering, a process should be established to ensure that LDUs have timely, adequate and correct information on customer load demands for planning, operations and maintenance purposes.

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### **ISSUE M. DISTRIBUTION SERVICE & SAFETY STANDARDS**

The continued adherence to historical distribution service and safety practices and standards will be a significant factor in determining whether or not future electric service quality to consumers remains at a high level.

With the advent of competition in the generation market, there is increased concern by many that the reliability and safety of local distribution service will be adversely impacted as utilities strive to maintain reasonable levels of income/profitability. The financial pressure of competition on LDUs who continue to have corporate involvement in deregulated aspects of the industry could divert needed fiscal and human resources away from distribution maintenance activities.

#### **RECOMMENDATION:**

It is recommended that the Commission examine the need to modify standards and monitor the distribution system reliability and safety of jurisdictional LDUs following industry restructuring.

### **ISSUE N. EMERGENCY RESPONSE (DISTRIBUTION)**

An important measure of electric system reliability to consumers involves the timeliness and adequacy of a utility's response to power outages and other emergency distribution system conditions.

Each utility is responsible for responding to system emergencies and requesting aid from other interconnected systems pursuant to bilateral agreements or other multi-party arrangements including those associated with regional reliability councils. Plans for load shedding or rotating blackouts required by generation or transmission system emergencies are coordinated within the local utility's control area.

Functional unbundling could complicate coordination of distribution system operations during generation and transmission system emergencies.

With numerous entities potentially providing retail service within a local distribution system, the complexity of responding to system emergencies could increase. With the potential of separate entities owning the distribution system, selling retail electricity and preparing electric bills, the probability increases that consumers may be unclear whom to call to restore service.

Without adequate coordination between the control area operators and the operators of the distribution systems, it will be impossible to implement measures to reduce customer load on the generation and transmission systems to forestall a worsening emergency situation.

Reliability of emergency response could be lessened due to separation of distribution, metering and billing functions.

### **RECOMMENDATION:**

All LDUs should have Emergency Response Plans in place. Such plans should include designating an emergency telephone number. The entity responsible for preparing electric bills should be required to convey the appropriate emergency telephone number in a clear and obvious manner. The Commission should explore the need to establish standards for distribution system operation, repair and safety during periods of emergency or disaster. LDU remedial action plans, such as load shedding due to supply/load mismatches, must be coordinated with the control area operator and approved in advance by the Public Service Commission or other regulatory body.

### **ISSUE O. METERING**

Utilities install meters at every point where the flow or the usage of electricity is to be measured. Metered information is needed to bill customers for their use of electricity. Meter data is also collected for customer load research purposes. Meters track power deliveries to wholesale customers, power transfers between utilities where their lines interconnect, and power flows at various points on the utility's transmission and distribution system. In short, metering is the basis for both measuring electricity and forecasting electric loads. As such, metering serves both operational and planning purposes.

With the arrival of competition in supplying electricity, metering will need to serve several additional purposes.

If LDUs continue to have metering responsibility, it may be necessary to adopt a combination of metering standards and estimation procedures that allow the LDU to provide customer information to REPs. This would allow the REPs to know what loads they are serving and to plan accordingly.

Metering requirements will also be driven by the pricing options offered by REPs and elected by customers. Most customers are currently unable to receive service under time-differentiated rates since their meters are not capable of storing this information.

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Timely and easily accessible metering information will be critical to assure proper matching of electricity supply and demand, and accurate short-term and long-term load forecasts. The reliability impact could be significant if REPs were unable to react to unexpected changes in the aggregate demand of their customers, who will now be located in areas served by many LDUs, and possibly multiple ISOs as well. This impact may be lessened if sufficient standby or default supplies are made available by the ISO or procured by the LDU.

### **RECOMMENDATIONS:**

Coordination of REP supplies with customer demands may require a combination of continuous real-time metering and estimation and reconciliation procedures. Metering requirements for communication, control and monitoring purposes should reflect the types of services available to retail customers and should be partially dependent on the types of settlement mechanisms used to correct over and under deliveries of energy. Such requirements should reflect the need to track and provide necessary information to REPs, their customers, and distribution utilities. This may require additional metering investment, particularly for customers who will have access to variably priced power and who wish to provide some of their own ancillary services.

Meter information without customers' identities should be available to the ISO and to any REP. Metering information including customers' identities should be available to the LDU and to the customer's selected REP. These recommendations are appropriate regardless of whether the LDU or a third party provide metering and billing services. The LDU will need to be able to contact customers directly concerning outage and maintenance matters, regardless of whether it bills the customer.

Alternative metering requirements, including types of meters and devices to disconnect load, should be analyzed with respect to system reliability, cost, consumer benefit, and effects on supplier-ISO-LDU load balancing before decisions on the market structure and scope of services available to customers are finalized.

In the event that a supplier's customers cannot or may not be disconnected when supplies are interrupted, a supplier must have formal arrangements in place to provide backup services.

### **ISSUE P. PROVIDER OF LAST RESORT**

In opening the provision of a vital service such as electricity to competition, care must be exercised to assure continued access to reliable service for all customers.



## **CHAPTER 7**

### **MARKET POWER**

#### **KEY CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS**

##### **1. KEY VERTICAL MARKET POWER CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS**

###### **CONCEPT:**

Vertical market power involves the ability of a firm to control an essential element in the vertical production chain and, through that control, cause competitors to be at a disadvantage through either restricted access or higher costs for the products or services required to produce and deliver the specific product. In electricity production, the transmission of electricity has been the central focus of vertical market power.

###### **ISSUE A. Should the Transmission Business be Operated by an Independent System Operator with Non-pancaked Transmission Rates? <sup>1</sup>**

Even with the Federal Energy Regulatory Commission (FERC) requiring open access on the transmission system and separation of the operation of transmission from generation/power marketing functions the local utility control area operator makes the final determination of what transactions can and cannot be allowed. The generation competitors may perceive that the transmission operator will favor its affiliated generation company in delivering their generation to end-use consumers within the utility's traditional service area, and can do this in the name of maintaining the reliability of the transmission system.

While FERC *Order 888* requires open access to the transmission grid, the transmission prices filed under this *Order* were made on an individual utility basis. For a transaction involving generation in one control area and load in another control area, the transmission customer must pay the transmission rates of each of the utilities on the "contract path" connecting generation to load. This "pancaking" of transmission rates will narrow the relevant geographic market for generation and will give the local utility a pricing advantage in marketing power to local load customers.

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<sup>1</sup> This material combines material from Section A.1 Utility Control of the Transmission System and Section A.2 Pancaked Transmission Rates from *Market Power and Other Competitive Issues for Retail Competition [Market Power]*, pp. 1–2, as contained in the Appendix to this report.



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### **OPTIONS:**

- (1) The General Assembly could require total separation of transmission from the competitive business of generation; or
- (2) The General Assembly could require transmission owners to join Independent System Operators (ISOs); or
- (3) Without an ISO, the FERC could implement strict enforcement and auditing of its *Order 888* rules.
- (4) The General Assembly could require local utilities to join an ISO or regional transmission group that has a regional transmission rate that eliminates the pancaking of individual utility transmission rates; e.g., either regional license plate or postage stamp transmission rates.

### **JURISDICTIONAL CONCERNS:** <sup>2</sup>

The regulation of transmission services has been held to be exclusively within the jurisdiction of the FERC. Therefore, it may be difficult for the state of Missouri to require that the transmission grid in Missouri be operated exclusively by an ISO. The design of the ISO's regional transmission rates (e.g., regional license plate or postage stamp) has also been held to be exclusively within the jurisdiction of the FERC. Therefore, it may be difficult for the state of Missouri to require a specific design of transmission rates for the transmission grid in Missouri. However, the FERC's policy has been to encourage the formation of regional ISOs with the purpose of placing the operation, planning and pricing of transmission under an independent entity and elimination of pancaked transmission rates.<sup>3</sup>

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<sup>2</sup> Jurisdictional concerns are discussed in the Competitive Market Structures Report chapter of *A report by the Legal Committee of the Missouri Public Service Commission Task Force on Retail Competition [Legal Report]*, Section A State and Federal Jurisdictional Issues Related to Market Power, pp. 1-4, as contained in the Appendix to this report.

<sup>3</sup> The FERC's criteria for ISOs as put forth in its *Order 888* are found in the Appendix to *Alternative Market Structures for Retail Competition [Alternative Structures]*; pp. A-1 to A-3, as contained in the Appendix to this report.

### RECOMMENDATIONS:

When any state unbundles services among generation, transmission and distribution, the FERC will have jurisdiction regarding all transmission issues, including the approval of ISOs and associated regional transmission pricing. This does not mean that the State has nothing to say regarding these matters.

- (1) Specifically, because of vertical market power concerns involving both the control and the pricing of transmission, the Task Force recommends that the General Assembly require all utilities to join regional ISOs as they become available .
- (2) While the Task Force is not recommending the formation of a Missouri only ISO, if ISOs are not available to all Missouri transmission providers at the time of competitive supply of generation, the Task Force recommends for utilities unable to join an ISO that the General Assembly authorize the Missouri Public Service Commission (Commission) to mitigate vertical market power in transmission services to the extent it can, consistent with FERC jurisdiction. Such mitigation may include:
  - (a) Requiring all Missouri transmission providers to form a regional transmission entity that will file a non-pancaked, regional transmission rate with the FERC and coordinate transmission planning within the state;
  - (b) Requiring structural separation of transmission from the generation and merchant businesses; and/or
  - (c) Requiring additional mitigation of utility horizontal market power (e.g., divestiture of generation) in light of the existence of pancaked transmission rates.

### **ISSUE B. Other Vertical Market Power Issues**

The Market Power Working Group report also included potential vertical market power issues entitled:<sup>4</sup>

- Consolidation of Certain REPs with Businesses Having Technologies that are Advantageous to Marketing Electricity
- Utility Control of Distribution Facilities

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<sup>4</sup> References: Appendix, *Market Power*: Sections A.3 and A.4, pp. 2-3.

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The working group report also included potential mitigation options for each of these possible issues. However, the Task Force does not have specific recommendations to make concerning the potential market power problems or possible mitigation raised by these issues.

### **2. KEY HORIZONTAL MARKET POWER CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS**

#### **CONCEPT:**

Horizontal market power is the ability of a single firm or small group of firms to control the price of the product. In the case of a single firm, horizontal market power is associated with a situation in which the firm having horizontal market power is a dominant firm with little threat of competition and significant enough barriers to entry to maintain dominance in the market. In the case of a small group of firms, horizontal market power can occur through explicit collusive behavior or through strategic behavior that jointly maximizes the self interest of each of the firms.

#### **ISSUE A. Mitigations to Use to Limit Horizontal Market Power Caused by Restrictions on Competition from Limits on Transmission Import Capability**

If a market area currently being served by generation facilities of a single provider has a substantial portion of its load that can only be served by that single provider during a significant number of hours, then that provider will have significant market power in that market area.<sup>5</sup>

#### **OPTIONS:**

- (1) Require that a certain amount of electricity from local generation be sold outside of its current service territory, thereby increasing the import capability into that area.<sup>6</sup>
- (2) Require the incumbent utility to expand its transmission import capability in order to reduce the amount of load and the number of hours for which it has significant market power. The cost of these new transmission facilities would first be approved

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<sup>5</sup> Reference: Appendix, *Market Power*: Section B.1; pp. 3–4.

<sup>6</sup> Additional import capability provided in this manner is only as reliable as the physical flow of power associated with the sale that created this import capability. Also, utilities currently do not allow a transmission reservation or schedule in one direction to create additional firm available transmission capacity (ATC) in the direction opposite of the reservation or schedule. For these reasons this mitigation measure may prove less effective in mitigating horizontal market power than other measures that are available.

by the Missouri Public Service Commission as necessary for reducing market power and then approved by the FERC for collection in transmission rates.

- (3) Set caps on wholesale prices that local generation can receive during the hours in which it has significant market power, including must-run provisions which would prevent local generation from being withheld.
- (4) Provide incentives for competitive generation to locate within the service territory in order to cut down on the incumbent's local market power, including local distributed generation initiatives.
- (5) Implement long-term bid requirements that prevent local generation from manipulating supply.
- (6) Require divestiture of generation facilities.

**ISSUE B. Mitigations to Use to Limit Horizontal Market Power Caused by the Leveraging the Market Clearing Poolco or PX Price**

If the poolco or PX sets the market clearing price (MCP) equal to the highest bid accepted for a given hour and pays this MCP to all generators whose bids are equal to or lower than the MCP, then any entity with an array of generation units with various marginal costs will collect additional revenues on all of its low-bid/low-cost generation whenever the MCP increases. This provides an opportunity for such entities to take the risk of bidding power from units they expect to have marginal costs that will determine the MCP for that hour at a level slightly higher than the marginal cost of those units. If there are only a limited number of competitors, this bidding strategy will likely cause the MCP to increase, thus providing the entity with higher payments from the poolco on all of its accepted generation. Even if the higher bid price results in generation not being accepted by the poolco from some of the entity's marginal units, the associated loss of profit from those marginal units may be more than offset by the additional revenues received by the entity from its low-bid/low-cost generation.<sup>7</sup>

**OPTIONS:**

- (1) Require must-run dispatch of certain generation units, which are then regulated with respect to price. For example, those units that would otherwise be earning additional revenues from leveraging could be capped at a regulated price

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<sup>7</sup> Reference: Appendix, *Market Power*; Section B.2; pp. 4–5.

## **MARKET POWER**

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- (2) Restrict the generation paid a single MCP to those providing generation at the margin for the hourly spot-market.
- (3) Expand the transmission system to reduce transmission constraints to the point where there is sufficient competition in generation that significant leveraging is not possible.
- (4) Divest generation into enough multiple owners that significant leveraging is not possible.

### **JURISDICTIONAL CONCERNS:**<sup>8</sup>

The FERC has exclusive jurisdiction over the operation of the wholesale power markets. To the extent that all but the divestiture mitigation option for horizontal market power involve some form of regulation of the wholesale power market, the state of Missouri may be precluded from being able to regulate horizontal market power through either a power pool or an ISO. However, the Commission, as well as other stakeholder groups, can propose that mitigation measures involving the wholesale power markets be implemented by the FERC.

### **RECOMMENDATIONS:**

The General Assembly should give the Commission the authority to take actions required to mitigate horizontal market power problems.

## **3. KEY BARRIER TO ENTRY CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS**

### **CONCEPT:**

A barrier to entry is anything that will prevent prospective providers from entering the market for electricity. It is important to note that economies of scale are no longer seen as a barrier to entry in the generation of electricity. But there are other actions which may pose threats to prospective providers from deciding to enter the market. For example, there may be governmental

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<sup>8</sup> Reference: Appendix, Legal Report: Section A State and Federal Jurisdictional Issues Related to Market Power; pp. 1–4; and Section B State and Federal Jurisdictional Issues Related to Market Structure; pp. 5–6.



rules that were implemented in the context of regulation and which, if not changed, could be a deterrent to entry.

### **ISSUE A. Preventing Eminent Domain from Being a Barrier to Entry**

When exercised by the utility alone, the power of eminent domain can be a barrier to entry. A non-utility seeking to purchase land for a generator, lacking eminent domain authority, may be dependent on a voluntarily negotiated price, whereas a utility having the power of eminent domain can force a price, thereby winning a less expensive route to site its generator.<sup>9</sup>

#### **OPTIONS:**

In the area of generation and access to transmission, eminent domain powers need to be available to either:

- (1) no generators; or
- (2) to all generators.

One way eminent domain could be made available to all generation businesses is for the General Assembly to lodge the granting of eminent domain authority with the appropriate state or local regulatory authorities. In this case, the generator wishing to purchase land, and which otherwise does not possess eminent domain authority, would first obtain regulatory permission.

### **ISSUE B. Other Market Barrier Issues**

The Market Power Working Group report also included a discussion of entry barriers issues entitled:<sup>10</sup>

- Predatory Pricing
- Market Certificate Requirements
- Incumbent Utility Being the Default Provider

The working group report also included potential mitigation options for each of these possible issues. However, the Task Force does not have specific recommendations to make concerning the potential market power problems or possible mitigations raised by these issues.

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<sup>9</sup> Reference: Appendix, *Market Power*: Section D. 3; p. 10.

<sup>10</sup> References: Appendix, *Market Power*: Sections D.1, D.2, and D.4; pp. 9–10.

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### **4. KEY LEVEL PLAYING FIELD CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS**

#### **CONCEPT:**

Level playing field issues involve those things that would give some competitors an unfair competitive advantage over other competitors. While not exclusively related to governmental rules or policies, these can inadvertently create competitive advantages and necessary changes should be made when moving into a competitive environment for the generation of electricity.

#### **ISSUE A. Preventing Information, Products or Services Exchanged Between the LDU and Its Affiliated REP from Resulting in an Unfair Competitive Advantage**

Transactions of information, products or services between the LDU and its affiliated REP can provide the unregulated affiliate with a competitive advantage when the information, products or services are not available to competitors on the same basis as they are available to the REP.<sup>11</sup>

#### **OPTIONS:**

- (1) Have in place strict affiliate transaction rules and codes of conduct between regulated and non-regulated business within the same utility that seek to prevent transactions involving information, products or services that are either below market cost or unavailable to the affiliate's competitors, requiring significant penalties and resources for effective implementation; or
- (2) Not allow the affiliated REP of the LDU to participate in the competitive generation market within the LDU's service territory.

#### **RECOMMENDATIONS:**

The Commission has authority to set and enforce rules regarding affiliated transactions and codes of conduct between regulated and non-regulated business of investor-owned utilities. If municipals and cooperatives are to participate in the non-regulated generation business, the General Assembly should extend the Commission's rule-making and enforcement authority with respect to affiliate transactions and codes of conduct between regulated and non-regulated business within the same utility to cover municipals and cooperatives. The State should require the Commission to have such rules and codes in place prior to the date that retail competition is to take place.

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<sup>11</sup> Reference: Appendix, *Market Power*: Section E.2; pp. 11-12.

**ISSUE B. Other Level Playing Field Issues**

The working group report also included a discussion of other potential level playing field issues entitled:<sup>12</sup>

- Use of the Utility's Name in Its Provision of Competitive Products and Services
- Gross Receipts Tax
- Taxation Issues
- Compensation to the LDU as Default Provider
- Unbundling Generation Rates through Credits to Bundled Rates
- One Hundred Percent Stranded Cost Recovery through True-Up

The working group report also included potential mitigation options for each of these possible issues. However, the Task Force does not have specific recommendations to make concerning the potential market power problems or possible mitigations raised by these issues.<sup>13</sup>

**5. KEY COMPETITIVE CONCEPTS, ISSUES, OPTIONS AND RECOMMENDATIONS FOR MUNICIPAL UTILITIES AND COOPERATIVE UTILITY SYSTEMS****CONCEPT:**

A separate section on competitive issues specific to municipals and cooperatives is included because these entities come from a structure outside of the context of profit making. Municipals are not-for-profit entities of city governments that provide electricity services to residences of the municipality. Cooperatives are also not-for-profit entities that were initially formed by groups of individuals that did not live within areas with electric service available from either investor-owned or municipal systems.

**ISSUE A. Preventing "Sunshine Law" from Placing Municipal Utilities at a Competitive Disadvantage**

The "sunshine law" requires that any and all records of a unit of local government, and all meetings, must be open to the public. The act allows records to be closed for a limited number of

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<sup>12</sup> References: Appendix, *Market Power*: Sections E.1, E.3, E.4, E.5, E.6 and E.7; pp. 11-14.

<sup>13</sup> To the extent that concerns are raised in areas other than market power regarding these issues, the Task Force will address those concerns in the other sections of its report.

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reasons; primarily lawsuits, personnel records and property acquisition negotiations. Declaring something "proprietary information" is not provided for in the act.<sup>14</sup>

The "sunshine law" does not allow a municipal utility to have any confidential information regarding its customers, their records or, in the case of a marketing function, the prices and contracts with customers. This puts a municipal utility at a distinct disadvantage in that its competitors can demand full disclosure of all prices and conditions but can refuse to offer the same in return.<sup>15</sup>

### **RECOMMENDATION:**

There should be consistency of treatment. To achieve this consistency, the Task Force recommends that municipal utilities participating in a competitive retail market have the same information disclosure and open meeting requirements as other entities providing comparable competitive services; provided, however, that these municipal utilities should open records for public review when they are no longer commercially sensitive.

### **ISSUE B.     Providing Opportunities for Lost Revenue Recovery for Certain Municipal Utilities that are Prohibited from Selling Electricity Outside Their City Limits**

Depending upon the size and class of a given city, state law prohibits the municipal from selling electricity outside its city limits. If competitors for retail electric customers are allowed to come into the city and take some of the municipal utility's customers, the municipal utility will need the authority to make sales outside its city limits to attempt to recoup some of its lost revenues.<sup>16</sup>

### **RECOMMENDATIONS:**

Change the state law to allow sales of electricity by municipals outside their city limits. Since many municipals are small, it may also be necessary to modify the Municipal Joint Action Law to allow the Missouri Joint Municipal Electric Utility Commission to aggregate the members' generation and make those sales.

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<sup>14</sup> Reference: Appendix, *Market Power*; Section C.1; p. 6.

<sup>15</sup> Reference: Appendix, *Market Power*; Section C.2; p. 6.

<sup>16</sup> Reference: Appendix, *Market Power*; Section C.3; p. 7.

### **ISSUE C. Providing Opportunities for Lost Revenue Recovery for Cooperative Utilities that are Restricted to Certain Markets**

By state law cooperative utilities cannot provide service to anyone living within a municipality with a population over 1,500 or to anyone who is not a member of the cooperative ("1500" and "member sales only" rules).<sup>17</sup>

#### **RECOMMENDATIONS:**

Change the state law to permit cooperative utilities who opt in to provide generation service to anyone requesting it.

### **ISSUE D. Other Municipal/Cooperative Competitive Issues**

The Market Power Working Group report also included a discussion of potential Municipal/Cooperative competitive issues entitled:<sup>18</sup>

- Restrictions on Services that Can be Offered
- Inability of Cooperatives to Bundle Natural Gas with Electricity

The working group report also included potential mitigation options for each of these possible issues. However, the Task Force does not have specific recommendations to make concerning the potential market power problems or possible mitigations raised by these issues.

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<sup>17</sup> Reference: Appendix, *Market Power*; Section C.4; p. 7.

<sup>18</sup> Reference: Appendix, *Market Power*; Section C.2; p. 6.