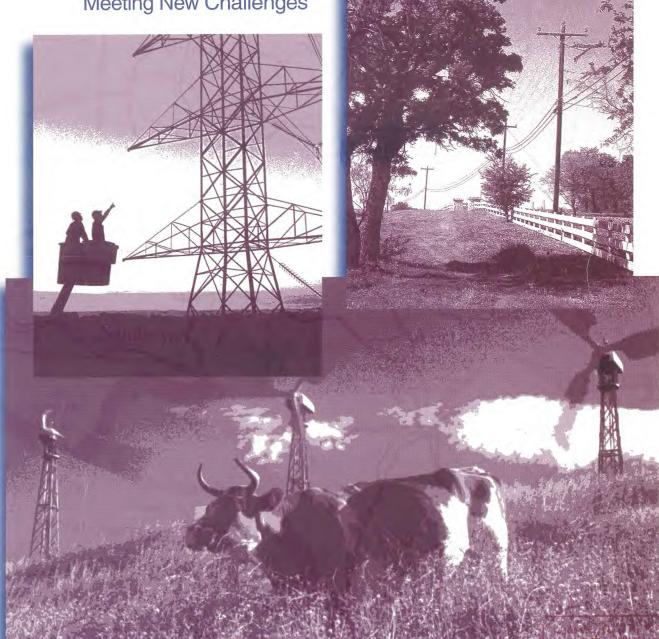
TEXAS ALTERNATIVES

Competitive and Regulatory Options In Telecommunications and Electric Power

A Roadmap for Meeting New Challenges



A Report to the 74th Legislature

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By the Joint Interim Committee on Telecommunications, Joint Interim Committee

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on the Public Utility Commission and the Texas Sunset Advisory Commission



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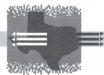
JOINT INTERIM COMMITTEES ON
TELECOMMUNICATIONS
AND THE PUBLIC UTILITY COMMISSION
AND THE
SUNSET ADVISORY COMMISSION

A REPORT TO THE 74TH TEXAS LEGISLATURE

January 10, 1995

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TO CLUMENT

January 1995

The Honorable Bob Bullock Lieutenant Governor Texas Senate

The Honorable James E. "Pete" Laney Speaker of the House Texas House of Representatives

Dear Governor Bullock and Speaker Laney:

The Joint Interim Committees on Telecommunications and the Public Utility Commission, in cooperation with the Sunset Advisory Commission, hereby submit their interim report.

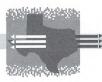
In response to the Committees' charges, our members diligently participated in public meetings, engaged in extensive study and took part in many thought provoking discussions. We were assisted by our Director, Carlos Higgins, our Assistant Director, Kelsi Reeves, and also by the many industry representatives and citizens who presented testimony and provided important background material to us.

The enclosed report presents the Joint Interim Committees' recommendations for the continuation of the Public Utility Commission and a sketch for the future of the Telecommunications market in Texas.

Respectfully Submitted,

Kenneth Armbrister, Chairman

Curtis Seidlits, Chairman



Note To Readers: In the interest of time and by agreement of the Committees, individual votes were not taken on each recommendation in this report. The right to dissent or comment in the report or add specific recommendations was reserved to each member. Further, the committee voted to adopt only the numbered recommendations.

ERIM COMMITTEE ON TELECOMMUNICATIONS

SENATOR DAVID SIB

(Co-Chair)

SENATOR KENNETH ARMBRISTER

SENATOR JOHN LEEDOM

Senator Leedom concurs in part and dissents in part with the Committee Recommendations.

Comments appear in Appendix 1.

SENATOR PEGGY ROSSON

Senator Rosson concurs in part and dissents in part with the Committee Recommendations. Comments

appear in Appendix 1.

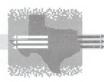
REPRESENTATIVE CURTIS SEIDLITS (Co-Chair)

REPRESENTATIVE DAVID CAIN

REPRESENTATIVE DEBRA DANBURG Representative Danburg provided comments to the Committee Recommendations. Comments

appear in Appendix 1.

REPRESENTATIVE TODD HUNTER



Note To Readers: In the interest of time and by agreement of the Committees, individual votes were not taken on each recommendation in this report. The right to dissent or comment in the report or add specific recommendations was reserved to each member. Further, the committee voted to adopt only the numbered recommendations.

JOINT INTERIM COMMITTEE ON THE PUBLIC UTILITY COMMISSION

Juan 1	Imbrist
SENATOR KE (Co-Chair)	NNETH ARMBRISTER
	1 John

SENATOR JOHN LEEDOM
Senator Leedom concurs in part and dissents in part with the Committee Recommendations.
Comments appear in Appendix 1.



SENATOR DAVID SIBLEY

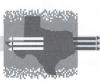
REPRESENTATIVE CURTIS SEIDLITS (Co-Chair)

REPRESENTATIVE LAYTON BLACK

REPRESENTATIVE DELWIN JONES
Representative Jones concurs in part and dissents in part with the Committee Recommendations.
Comments appear in Appendix 1.

REPRESENTATIVE ROBERT SAUNDERS
Representative Saunders concurs in part
and dissents in part with the Committee
Recommendations. Comments appear in
Appendix 1.

REPRESENTATIVE SYLVESTER TURNER



THE INTERIM COMMITTEE STAFF

Executive Director Carlos Higgins

Assistant Director Kelsi Reeves

> Legal Staff Amy Inman

Research and Administrative Staff Lyndell Hull

ACKNOWLEDGEMENTS

The Interim Committee wishes to thank the following for their contribution to this project:

Office of the Governor
Office of the Lt. Governor
Office of the Speaker
Sunset Advisory Commission
Interim Committee Members' Staffs
Texas Legislative Council
The Department of Information Resources
The Public Utility Commission
The Office of Public Utility Counsel
Texas Senate Support Services
Texas House Administration Committee

Layout Production
Texas Comptroller of Public Accounts

We also wish to thank the many other state, industry and consumer representatives for their involvement in this project, especially those who participated in our working group sessions and testified before the committee.

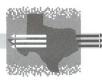
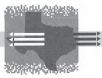


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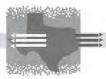
INTERIM COMMITTEE CHARGES

CHARGE TO THE JOINT INTERIM COMMITTEES ON TELECOMMUNICATIONS

- 1. Study and develop a long term telecommunications policy that promotes technological innovation, economic competitiveness, customer service and universal service while protecting consumers of monopoly services;
- 2. Study and make recommendations for the appropriate regulatory framework to promote the state's telecommunications policy, including any necessary statutory changes to achieve that framework.
- 3. Study and make recommendations for changes to the Public Utility Regulatory Act to implement the state's telecommunications policy.
- 4. Study and make recommendations for any other legislative changes needed to achieve the state's telecommunications goals.

CHARGE TO THE JOINT INTERIM COMMITTEES ON THE PUBLIC UTILITY COMMISSION

- 1. Study and make recommendations regarding tax issues, including tax credits, consolidated returns, affiliates, and disallowances for all utilities except for gas utilities.
- 2. Study and make recommendations regarding the structure and organization of the Public Utility Commission and the Office of Public Utility Counsel.
- 3. Study and make recommendations regarding proceedings before the Public Utility Commission.
- 4. Study and make recommendations regarding any other changes to the Public Utility Regulatory Act that the Committee determines are needed.



The contents of the following report containing the specific issues listed below are not intended to establish legislative intent. The members of the Joint Interim Committees on Telecommunications and the Public Utility Commission reserve the right to include any recommendations from this report when drafting the final bill. The members also reserve the right to include issues not included in this report if it is deemed necessary to present a complete legislative package. The summary found below each recommendation in this report is not intended to be biased towards one interested party over another. Each issue will be decided on its own merit, understanding that the final bill will purposefully be designed to meet the best interests of the state of Texas.

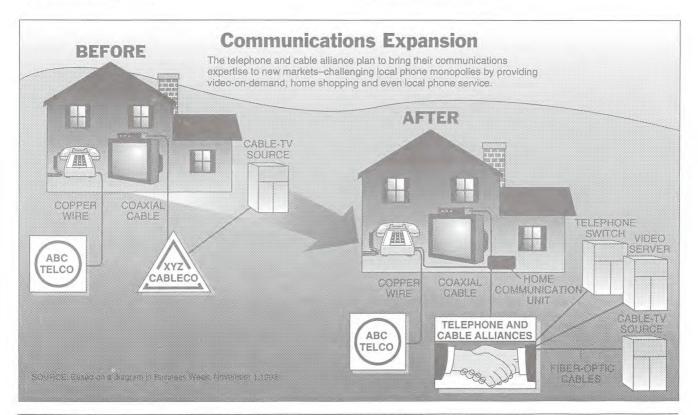
INTRODUCTION

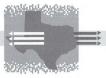
In utility regulation, as in all our endeavors, status quo is not much of a hurdle in the path of change—and today, change may be found throughout the electric and telecommunications utilities industries. In recognition of these changes, Lt. Governor Bob Bullock and House Speaker Pete Laney created two committees to review the Public Utility Commission and telecommunications, and to provide recommendations to the 74th Legislature.

The Public Utility Regulatory Act (PURA), is the body of regulations defining the governing latitude and limits of the Public Utility Commission (PUC). PURA was adopted in 1975 to provide consumers with those protections and safeguards normally provided through the forces of competition.

This report is the product of a great amount of time, effort, and study, not only of the legislators assigned to the two committees and their staff, but also of an impressive number of people who spent untold hours in this endeavor. Included were representatives of the various utilities and related industries, and a number of others representing a variety of relevant interests.

This report includes basic background material covering the committees, their efforts and the reasons for creating our committees; describes the process followed by the committee in seeking to fulfill the committee charges; discusses many of the issues encountered and studied by the committee; and finally, provides the committees' initial and tentative recommendations for addressing those issues.



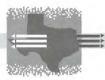


Initial recommendations made in this report do not represent the end of the committees' work. Decisions made by these committees still must be translated into legislative language.

Subject matter in our report is presented in three basic chapters. The first chapter primarily covers structural issues—those relating to the organizational structure, procedures, staffing of the PUC, and the common issues—those regulatory provisions which impact upon both electric utilities and telecommunications entities.

The second chapter is devoted to the electric utility industry. The chapter includes a more thorough exploration and description of current pressures for change in that industry. We then report our conceptual recommendations related to a variety of issues affecting this industry.

The last chapter includes our attempt to describe the major changes taking place in telecommunications, and our recommendations for responding to those changes. Here, technological innovation is the major factor responsible for the growing inadequacies of our regulatory laws.



BACKGROUND

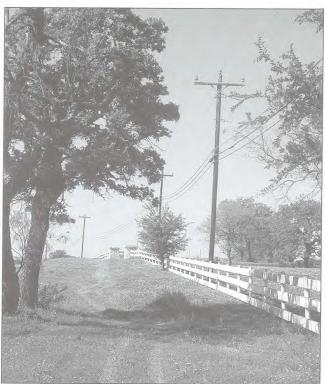
he expressions "entering a new era", or "currents of change" are frequently used to describe current changes which affect regulated utilities. They are all accurate; change is greatly affecting all our utilities. This report is limited to the telecommunications and electric utility industries because utility regulatory laws in Texas are structured in a way that pairs those two utilities under regulation by the Public Utility Commission (PUC). The PUC is the subject of legislative scrutiny for the legislative session which began in January of 1995.

Electric utility services and telephone services were both thought to be more efficient and economical when delivered as monopoly services. The potential for abuse is inherent in a business which holds monopoly power over vital services. Through repeated experiences, citizens have realized that monopolies must be regulated. In the absence of competition, it is regulation which compels them to offer services of reasonable quality at reasonable prices. PURA was therefore designed explicitly to regulate monopolistic utilities.

Just as status quo cannot long endure in the face of change, a monopoly cannot long withstand the pressure of competition. Even though some competition has existed in the delivery of telephone and electric utilities services in Texas, until recently it has not been enough to seriously threaten the monopoly utilities. Co-generators have been producing a small percentage of power used in Texas, compared to the monopoly utilities. But recently, as will be discussed in more detail later in this report, co-generators and other independent power producers have been pushing for an opportunity to seriously compete in the production of power. The telephone companies have faced significantly more competition from "niche" providers. Because of technological innovation and changes in regulatory law, though, the local telephone company's monopoly status security blanket is fast wearing too thin for their comfort. Those changes will also be discussed in greater detail later in this

The life of the monopoly can be prolonged if government continues to provide protection to the monopoly. Government provides that protection when the regulatory laws repel or severely limit competition. The core question to be answered now is whether electric and telephone services should continue to be delivered as monopoly services, and how much government protection is appropriate?

To the extent we believe we should have monopoly services, government regulation should continue. To the extent effective competition exists, regulation should be

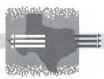


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reduced or removed. To the extent government allows competition to grow, by ending its protection of the monopoly, regulation should be adjusted. The adjustments should be in the form of transitional measures. They should pave the way for competition to grow, while seeking to avoid traumatic shock or displacement to consumers or to the transitioning monopolies.

Timely and appropriate regulatory changes can smooth the inevitable transition from monopoly markets to more competitive markets. The key lies not only in the policies and goals adopted by the state, but also in the degree of flexibility which the state builds into its regulatory framework. The period of transition from a monopoly system to a competitive system holds great potential for economic shock to any of the stake-holders in the industry. That shock can be avoided, or at least held to minimum, by establishing a regulatory framework which provides adequate direction and limits to the regulatory agency, but which simultaneously provides that regulatory body with sufficient latitude to adapt old laws to new and changing circumstances.

The pressures for change are not entirely new. Many of the same pressures, especially in telecommunications, were there more than two years ago. That pressure led



to a major attempt to change PURA during the last legislative session. That attempt failed, however the many valid reasons for passing new utility legislation which existed before the last session did not go away. If anything, they multiplied and got stronger. In response, our legislative leaders called for the creation of these interim committees.

As previously indicated, there are two committees - The Telecommunications Committee and the Public Utility Commission Committee. Whatever one committee decides, those decisions will likely affect decisions made by the other committee, so the two committees have, for the most part, held joint meetings.

Not only have these two committees worked closely together, they have also coordinated with the Sunset Advisory Commission, in order for that Commission to fulfill its statutory responsibility to review the PUC. This report represents the continuing close coordination between these committees and the Sunset Advisory Commission.

The committee staff started with a number of basic issues raised last session, and created a survey form from those issues. Those surveys were distributed to a large number of state, industry and consumer representatives and anyone else who had shown strong interest in these issues at the PUC, or in the legislative attempt last session.

The survey results helped point out the more important issues, and clarify positions of various stakeholders. This information was then used to form working groups made up of the various stakeholders and other interested parties. We also used the information to identify core issues, explore the concerns within those issues, explore the considerations and options, and to establish the initial points of agreement and disagreement.

The working groups met during 20 full-day working sessions this past summer. About 40 or more people took part in each session. Some of those sessions were devoted to electric utility issues, some to telecommunications, and some to the common issues affecting the PUC structure and both categories of utilities.

During this process, two comprehensive, competing telecommunications proposals were offered. They were used as a basis for debate and discussion. One was offered by two groups, the Texas Telephone Association and the Texas Statewide Telephone Cooperative Association. Another was offered by a group which identified itself as the Alliance. The Alliance is comprised of the Communications Coalition of Texas, the Office of Public Utility Counsel and Consumers Union. Coalition members include other consumer groups and telecommunications industry representatives other than the local exchange companies.

During the summer work sessions, representatives of the electric utilities offered a number of proposals, but no comprehensive re-write of PURA. We later received a revised PURA from the utilities, and then another one from a large number of other interested parties, including consumers.

After the last working group meeting, members of each group were asked to submit their comments and proposals, and their arguments for and against various proposals, together with their responses to the arguments made by others. We compiled all these comments and arguments in a "working group issue book" for use by our interim committee members, as well as for all interested parties.

We do not claim the issue book includes all the options or answers. As a practical matter, it cannot even include all the issues, because we continue to encounter new issues each day. Although it may not be possible to create and discuss an exhaustive list of the issues, a reader of this book should have a much greater appreciation for the questions, and will have a better understanding of many of the options related to those questions.

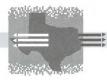
In addition to the many meetings involving members of the working groups and staff, the committees held seven public hearings to receive public testimony and to the review progress of the negotiations.

Our summer working group negotiations ended in early August. Toward the end of August, we resumed negotiations among selected parties on telecommunications issues. Those negotiations are still taking place as this report is being written.

In late November, we called for negotiations to resume among a smaller group of parties representing interests in the electric utility industry. Those negotiations are also continuing, as this report is being written.

In early December, we received a revised PURA proposal from the AECT (Association of Electric Companies of Texas), which includes their version of how electric utilities should be regulated in Texas. A few days later, we received another version of PURA—a proposal which reflects the views of a group which includes many other major stakeholders in the electric utility industry.

Our report is less than conclusive, since negotiations are still in progress. The report is a "conceptual" one, rather than one which makes specific recommendations for the various issues. Specific and detailed recommendations may be found in proposed legislation offered by the committees.



CHAPTER ONE

RECOMMENDATIONS

The following twenty recommendations regarding the structure of the PUC and any issue common to both the telephone and electric industries are discussed in the next section of the report.

Adoption by the committees of any recommendation in this report does not mean any related proposal is adopted. The recommendations are intended to stand alone; they are complete within themselves.

RECOMMENDATIONS

Recommendation 1: Transfer the hearings division of the PUC to the State Office of Administrative Hearings.

Recommendation 2: Define the role of the general counsel to ensure the Commission's interests are well represented, as in-house counsel and not as an independent party to the proceedings.

Recommendation 3: Adjust the role of the Office of the Public Utility Counsel (OPC) to ensure residential and small business consumers' interests are appropriately represented in PUC proceedings.

Recommendation 4: Remove outdated statutory organizational requirements and make the executive director responsible for running the day-to-day operations of the agency.

Recommendation 5: Authorize the governor to designate the commission chair.

Recommendation 6: Remove the age requirement for appointment as a PUC commissioner.

Recommendation 7: Tighten the conflict of interest provisions for PUC commissioners and apply them to the executive director, the general counsel, and the public counsel.

Recommendation 8: Prohibit the PUC from adjusting the gross receipts assessment.

Recommendation 9: Authorize the PUC to do a management audit of each utility only as needed rather than requiring one to be done every 10 years.

Recommendation 10: Authorize the PUC, upon receiving a complaint, to set temporary rates and time limits until the appropriateness of the utility's rates has been determined.

Recommendation 11: Authorize the PUC to include reasonable charitable contributions as an expense.

Recommendation 12: Broaden the PUC's authority to assess administrative penalties.

Recommendation 13: Allow administrative law judges to impose sanctions against parties in contested cases.

Recommendation 14: Require the PUC to formulate a process for settlement.

Recommendation 15: Require hearings examiner to limit discovery.

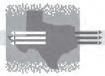
Recommendation 16: Streamline the process for notifying cities of proposed rate changes.

Recommendation 17: Authorize the PUC to focus parties on contested issues and any new issues which arise as a result of discovery.

Recommendation 18: Allow hearings examiners to group parties, except OPC, with the same interests, with language to protect the rights of parties who are grouped to present witnesses.

Recommendation 19: Require the hearings examiners to limit parties' time in presenting cases.

Recommendation 20: Revise rate-setting treatment of utilities' federal income taxes in PURA as necessary, to ensure equitable treatment of both ratepayers and utilities. ■



CHAPTER ONE

Public Utility Commission and the Office of Public Utility Counsel: Structure and Common Issues

Note: For a more comprehensive description of the Public Utility Commission and the Office of Public Utility Counsel, see Appendix 2.

The Public Utility Commission (PUC) exists as an arm of the Texas Legislature to regulate the activities of electric utilities and our public telephone network. The Joint Interim Committees on Telecommunications is charged with recommending an appropriate regulatory framework to reflect the state's telecommunications policies. The Joint Interim Committees on the Public Utility Commission is charged with recommending any appropriate changes to the structure of the PUC itself, and any needed changes to the PURA which impact telecommunications and electric policies.

This area of discussion includes issues which are common to both the electric industry and telecommunications, as well as the structure of the PUC itself.

A good example of a common issue is that of federal taxes. Very little time was spent by the working groups on this issue because it has been debated so much at the PUC and in the courts, and the competing positions are well known. There was no indication that anyone was ready to concede any ground, and apparently, no one found any middle ground.

Assuming major changes are made in the way rates are set for telephone companies, these tax issues become less important, at least to those telephone companies. The electric utilities are also proposing changes to the rate-setting procedures.

One of the major issues affecting the PUC is its hearing section; whether it has the independence it should, and whether it should be transferred to the State Office of Administrative Hearings. A number of observers of the PUC, including the Sunset Commission, have questioned the independence of the PUC hearings section, and this possible transfer is a solution being considered.

Another significant PUC issue involves the role of the General Counsel. Basically, the question is whether the general counsel should appear in PUC cases as an independent party, independently representing the public interest when the ultimate responsibility for representing the public interest within the PUC rests with the Commissioners.

Any change in the General Counsel role will require an expansion of the Office of Public Utility Counsel's ability to participate in rate cases, and probably some adjustment in the relative size of the staff assigned to each.

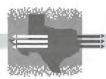
Whatever change is made to the general counsel, it is clear the PUC will need to retain a sizeable staff. Their job is not going to be any easier. Whatever changes are made to the regulatory laws, there will be a transition period full of new PUC rules and adjustments to be made. In addition, the general counsel will be needed to help interpret and litigate the new rules and laws.

Other PUC issues include qualifications to serve as Commissioner, ability of the PUC to impose administrative penalties and sanctions, frequency of audits of utilities conducted by the PUC, how much streamlining of the hearing process to require, whether to allow the PUC to set temporary rates pending the outcome of a Sec. 42 proceeding, and several others.

STRUCTURAL ISSUES WITHIN THE PUBLIC UTILITY COMMISSION

The 1992 Sunset review of the PUC identified several problems with the current structure which were affecting the regulatory atmosphere at the PUC. The Interim Committee was faced with the following concerns:

- Lack of independence between the hearings staff and the commissioners. It was determined that this lack of independence could affect the quality of decisions at the PUC by the commission's ability to influence the hearings process. The Sunset Commission identified concerns that direct or indirect pressure is exerted on the hearings staff as a result of the employer-employee relationship between the commissioners and the director of hearings.
- Lack of independence between the general counsel and the commissioners. As the general counsel is hired by the commissioners and is a party to cases before the commissioners it was suggested that it is inappropriate to have a party to the case under the direct authority and influence of the commissioners who decide the case.
- Inability of commissioners to use staff expertise in reviewing evidence because a large portion of the staff is involved as a party to cases. Utility rate cases are extremely technical and complex. The commissioners need assistance in reviewing the voluminous technical information in rate cases but are limited in



using the expertise of their staff because a large number of staff members are involved in the cases being decided by the commissioners.

Recommendation 1: Transfer the hearings division of the PUC to the State Office of Administrative Hearings.

Currently, the physical location of the hearings division at the PUC places hearings examiners and administrative law judges alongside the technical staff who testifies in all proceedings at the agency. This situation contributes to a perception by the public that the hearings staff is virtually indistinguishable from the PUC staff as a whole.

Recognizing the dependency between the hearings division and the Commissioners, the Interim Committee recommends transferring the hearings division to the State Office of Administrative Hearings (SOAH), an independent hearings agency created by the legislature in 1991. The transfer would act to improve the independence, quality, and cost effectiveness of PUC hearings. The functions that should be transferred are those responsibilities directly related to conducting the administrative hearings required by the PUC. In addition to the transfer of the hearings functions, a transfer of hearings examiners and ALJs would also occur. Because of the complexity of utility regulation, the hearings examiners and ALJs from the PUC would be transferred to SOAH to ensure expertise in utility matters.

The Sunset Commission recommended that a task force be established to administer the transfer of the hearings division to SOAH. The task force is to be composed of the Lt. Governor or the governor's designee; the Speaker of the House or the speaker's designee; the Legislative Budget Board's designee; the chairman of the PUC; the public utility counsel; and the chief administrative law judge of SOAH. The task force shall determine the personnel, equipment, data, facilities, and other items that will be transferred. This task force will also be responsible for mediating and resolving any disputes between the two agencies relating to a transfer. After the transfer has been completed, the task force shall prepare a written report detailing the specifics of the transfer and shall submit this report to the governor and the legislature.

There is a fine line between maintaining enough independence between the Commissioners and the ALJ's and endangering the Commissioners' decision making authority. It is important to strike a balance between the two steps of the process. The hearings division, whether it be at the PUC or SOAH must have the power and authority, free from outside influence, to hear a rate case and make the best recommendation based on the facts. The Commissioners, on the other hand, are politically accountable for the final determination in a contested proceeding and must have the decision making authority to modify or overrule an ALJ's recommendation.

Recommendation 2: Define the role of the general counsel to ensure the Commission's interests are well represented, as in-house counsel and not as an independent party to the proceedings.

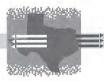
As a result of the Sunset review, several recurring problems with the current role of the general counsel were identified. A lack of independence between the general counsel and the Commissioners was determined. As the general counsel is hired by the Commissioners and is a party to cases before the commissioners it was suggested that it is inappropriate to have a party to the case under the direct authority and influence of the commissioners that decide the case. This recommendation would prohibit the staff from testifying before the commission unless the testimony is necessary to complete the record and another party has not addressed the issue.

Traditionally, the general counsel's role was to advocate the "public interest" case before the commission. This case has been defined as the balance between the utilities and consumers. The Sunset review indicated that this position was unnecessary since the Office of Public Utility Counsel (OPC) is charged with upholding the consumers' interests and the utilities are generally very well represented by their own legal staff. If all parties are adequately and fairly represented by their own counsel, the need for a "public interest" case diminishes significantly. Thus it was recommended that the role of general counsel be limited to acting as a corporate counsel to the PUC.

Another identified problem that was raised is the commissioners need for further assistance in reviewing the technical information involved in rate cases. The commissioners are prevented from using the expertise of the staff because a large portion of the staff are involved in the cases being decided by the commissioners. Because general counsel staff are testifying witnesses before the commission they are therefore not allowed to confer with the commissioners outside of the proceeding. The need to segregate testifying staff from non testifying staff significantly decreases the number of available experts to assist the commissioners in sifting through evidence. Eliminating the general counsel's role as a party to cases would increase staff resources available to the commissioners.

This recommendation in no way suggests that the role of general counsel should be eliminated completely. The general counsel will still play a vital role within the PUC. Some of the duties of the general counsel will include: providing legal advice and counsel as in-house counsel for the commission in cases before the commission; accumulating information from the utilities and conducting investigations; and preparing proposed changes in rules.

Recommendation 3: Adjust the role of the Office of the Public Utility Counsel (OPC) to ensure residential and small business consumers' interests are appropriately represented in PUC proceedings.



The findings of the Sunset review of the PUC suggested that the role of the general counsel as a party to contested cases should be modified and the role of OPC should be adjusted. The Sunset Commission recommended that some technical and legal staff from the general counsel's office be transferred to the OPC. In order to ensure that consumers were not adversely affected by this restructure, the role of OPC was extended to represent consumers in all proceedings that significantly affect residential and small business consumers.

Currently the Public Utility Regulatory Act (PURA) states that OPC *may* intervene in proceedings affecting residential and small business consumers. OPC's present budget allows the agency to participate in only 6 percent of all major rate cases and 8 percent of all other proceedings.

Consumers would undoubtedly benefit from a more extensive representation. The public interest is better served in a hearing if the broad range of interests are represented by well-funded advocates.

MANAGEMENT ISSUES WITHIN THE PUBLIC UTILITY COMMISSION

Currently, PURA contains very specific language regarding the organization and staffing of various divisions within the PUC. The statute requires the commission staff to include specific provisions such as an executive director, director of hearings, and a chief accountant. In addition, the statute specifies the general disciplines from which the PUC shall draw its employees such as accounting, engineering and economic research. In response to changing regulatory needs, in 1987 the PUC reorganized to divide into two distinct divisions—electric and telephone. After this reorganization the agency found the outdated statutory organizational requirements to be restrictive.

The PUC indicated that the statutorily imposed organizational pattern is outdated and contains more details than similar statutes that organize other state agencies. The agency also indicated a lack of clear guidelines with regard to the duties, responsibilities and authority of the executive director.

Based on these observations from the PUC, the Sunset review of the agency recommended several modifications in the statute to afford the PUC more flexibility in the area of management.

Recommendation 4: Remove outdated statutory organizational requirements and make the executive director responsible for running the day-to-day operations of the agency.

Removing specific requirements for organization and staffing would provide the PUC with the flexibility to organize the staff as necessary to meet the present goals of the agency. It would also grant the executive

director the authority to oversee the day-to-day operations of the agency.

Recommendation 5: Authorize the governor to designate the commission chair.

Presently, the PUC commissioners are appointed by the governor for six-year staggered terms. The chair of the commission is then elected by the members of the commission. In order to further the goal of making state agencies more accountable to the governor, it was recommended that the governor be authorized to designate the commission chair. The ability to designate the chair of an agency's policymaking body strongly enhances the accountability of that state agency to the governor.

Recommendation 6: Remove the age requirement for appointment as a PUC commissioner.

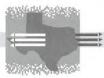
The Public Utility Regulatory Act presently requires commissioners to be at least 30 years of age. This requirement, which seeks to restrict persons under 30 years of age who could be found to be quite qualified for the job otherwise, has been found to be unnecessary.

Recommendation 7: Tighten the conflict of interest provisions for PUC commissioners and apply them to the executive director, the general counsel, and the public counsel.

PURA contains specific provisions aimed at prohibiting the appointment of commissioners who have direct ties to regulated utilities or their affiliates.

Some of these provisions include:

- Prohibiting the appointment of anyone who has served as an officer, director, owner, employee, partner, or legal representative of a public utility or affiliated interest within the previous two years.
- Prohibiting the appointment of anyone who directly
 or indirectly owns or controls \$10,000 or more of
 stocks or bonds in a public utility or affiliated interest. Commissioners and PUC employees are also prohibited from having a pecuniary interest, including
 income, compensation, or payment of any kind, in a
 public utility or affiliated interest, or in any person or
 company that does a significant amount of business
 with public utilities or affiliated interests, excluding
 nonprofit organizations.
- Prohibiting commissioners from directly or indirectly owning or controlling securities in a public utility and prohibits them from accepting gifts, gratuities, or entertainment from a public utility or affiliated interest or from any person or company that does a significant amount of business with public utilities or affiliated interests.
- · Prohibiting commissioners from requesting or rec-



ommending employment of any person by a regulated utility or affiliated interest.

This recommendation would broaden the conflict of interest provisions to include the executive director, general counsel and the public counsel. In addition, it would prohibit these individuals from serving on boards of companies that supply fuel, services, or utility-related goods or products to regulated or unregulated utilities. It would also exclude appointment of a person or spouse who owns or controls more than 10 percent interest in a utility's competitor or supplier or other related entity or has an interest in a mutual fund or retirement plan that has more than 10 percent interest in any of these types of holdings.

UPDATING PURA TO AUTHORIZE NECESSARY COMMISSION AUTHORITY AND ELIMINATE OBSOLETE MANDATES

The original language of PURA, which was enacted in 1975, authorized certain actions by the PUC that have been rendered unnecessary as a result of changed circumstances. By the same token, changes in the electric and telephone industries have necessitated giving the PUC greater authority than it is currently afforded under PURA. The Sunset review of the PUC indicated several changes should be made to update the PUC's authority.

Recommendation 8: Prohibit the PUC from adjusting the gross receipts assessment.

To fund the PUC and OPC, PURA requires every utility under the jurisdiction of the PUC to pay an assessment on its gross receipts. The assessment is deposited into the general revenue fund from where PUC and OPC appropriations are drawn. Utilities are allowed to recover the cost of the assessment from their ratepayers. PURA also authorizes the PUC to adjust the gross receipts assessment, subject to the approval of the legislature. This approach was reasonable when it was unclear how much money an agency would need for future operations.

History has now shown that the gross receipts assessment is more than sufficient to cover appropriations for both the PUC and OPC. In fiscal year 1993, the assessment generated \$28.6 million while the PUC's expenditures totaled \$10.7 million and OPC's expenditures totaled \$1.4 million. The primary reason for the PUC to monitor and recommend adjustments of the assessment to the legislature no longer exists.

This recommendation would prohibit the PUC from adjusting the gross receipts assessment but would allow the legislature the option to do so.

Recommendation 9: Authorize the PUC to do a management audit of each utility only as needed rather than requiring one to be done every 10 years.

In 1983 PURA was amended to require the PUC to conduct a management audit of each utility at least once every 10 years. The resulting management audit helps the PUC stay informed about utility management and provides recommendations to the utilities for improved efficiency, effectiveness, and cost savings. The number of audits conducted each year depends on the size of the utilities to be studied, the scope of the audits, and the complexity of the issues to be addressed. Currently there are 160 utilities being audited.

While these audits are quite helpful and have implemented improvements to management that have resulted in cost savings to utilities of more than \$100 million annually, PURA did not provide a separate funding source for these audits, nor did it authorize the PUC to recover the costs of the audits from the utilities being audited. As a result, the PUC has not had the budget or the staff resources capable of meeting this requirement.

The PUC recommended that PURA be amended to eliminate the statutory mandate that the PUC audit each utility at least once every 10 years, but allow for audits as needed.

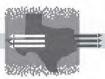
Recommendation 10: Authorize the PUC, upon receiving a complaint, to set temporary rates and time limits until the appropriateness of the utility's rates has been determined.

Rate reduction cases under Section 42 of PURA and rate increases under Section 43 of PURA are addressed differently in the statute. One difference is that during a rate increase case, initiated by the PUC, the PUC is statutorily authorized to set temporary rates to protect the utility from the delay caused by the regulatory process. However, the PUC is not statutorily authorized to set temporary rates in Section 42 rate reduction cases. In addition, the statute establishes time limits for many proceedings at the PUC, including rate increase cases, but other proceedings, such as rate decrease cases, do not have time limits for taking action.

The recommendation would create a system for rate reduction cases that parallels the system for rate increase cases. This would protect the consumers from being forced to pay rates that are known to be too high during the pendency of a sometimes lengthy rate reduction hearing. This system would also eliminate the disincentive a utility that is over-earning has to avoid a quick resolution of the case. Authorizing the PUC to set temporary rates and time limits would protect consumers from paying excessive rates and encourage utilities to negotiate rate reduction cases in a more timely manner.

Recommendation 11: Authorize the PUC to include reasonable charitable contributions as an expense.

Currently PURA authorizes reasonable charitable or civic contributions as expenses for ratemaking purposes, not to exceed the amount approved by the PUC. It is



up to the commissioners to determine if charitable contributions made by a utility can be included as part of that utilities operating expenses and ultimately paid by the ratepayers.

The Sunset Commission recommended that charitable contributions be excluded from the operating expenses and therefore be funded directly from shareholders profits. However, this committee determined that in order to encourage utilities to freely make donations the commission should retain its discretion to determine if a charitable contribution is a reasonable expense to be included in the ratebase.

This recommendation would continue to allow the PUC to include as an expense such charitable contributions as it finds reasonable, thereby sending a strong message to utilities in favor of these donations. Allowing utilities to include charitable contributions as an expense would encourage utilities to make charitable contributions which would significantly benefit the communities they serve. As good corporate citizens, electric utilities have an obligation to contribute, as deemed appropriate by the commission, to organizations that have broad community support and provide valuable community services.

PUC AUTHORITY TO ADMINISTER PENALTIES, SANCTIONS AND SETTLEMENT PROCEDURES

PURA gives the commission guidelines and directions regarding the organization of the agency, the setting of rates, and procedures for conducting hearings. However, the PUC has been given relatively little enforcement authorities. The few enforcement powers that exist are severe or expensive and time consuming to pursue and are usually reserved for serious violations. These enforcement tools include: third-degree felony convictions for knowingly and willfully violating the statute, requesting the attorney general's office to seek civil penalties and filing contempt proceedings. The Sunset review of the PUC recommended giving the PUC the power to enforce administrative penalties and sanctions to ensure the ability to enforce minor violations for such requirements as reporting and billing.

Recommendation 12: Broaden the PUC's authority to assess administrative penalties.

The PUC regulates almost every aspect of a public utility's business activities, from utility rates and quality of service to billing requirements. Many of these regulatory duties require cooperation from the utility. Other utilities are not rate regulated but are required to file certain documents and reports with the PUC.

Currently, the PUC has several tools in place for sanctioning utilities that violate statutes, rules and orders. Most of these enforcement powers are intended for major infractions and are seldom used because of their severity, expense and time-consuming nature. The

PUC's ability to enforce its statutes, rules and orders are hampered by the agency's lack of enforcement tools, which could result in harm to ratepayers.

This recommendation would require a finding in favor of a preponderance of the evidence before the administrative penalty could be imposed. The commission would be authorized to assess administrative penalties of up to \$5,000 a day per violation against public utilities for violations of the PUC's statute, rules, requirements or orders. All penalties will be deposited into the general revenue fund. Utilities will be prohibited from recovering administrative penalties from consumers through their utility rates.

Recommendation 13: Allow administrative law judges to impose sanctions against parties in contested cases.

Similar to the problem the PUC faces in enforcing its substantive statutes, rules and orders, the PUC has limited enforcement power to discipline violations of its procedural rules. This recommendation would allow administrative law judges and hearings examiners to impose administrative sanctions against parties in a hearing for specific actions, such as abusing the discovery process. This will ensure a more efficient and orderly proceeding. More efficient proceedings result in considerable savings of time and money for both the utilities and consumers.

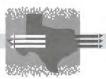
The PUC has taken measures to remedy this situation by the adoption of Procedural Rule 22.161. This administrative rule allows the hearings officer to impose such sanctions as:

- Disallow any further discovery of any kind or a particular kind by the disobedient party.
- Disallow, in part or in whole, the disobedient party's presentation of evidence on issues that were the subject of the discovery request.
- Limit or disallow the disobedient party's right to participate in the proceeding.
- Recommend to the commission that all or part of rate case expenses, including attorney's fees be disallowed.

Recommendation 14: Require the PUC to formulate a process for settlement.

The PUC has two main processes for resolving contested cases. First, contested matters may be resolved through a formal hearings process that is conducted according to PURA and the Administrative Procedures Act (APA). Second, contested matters may be resolved by an informal settlement reached by some or all of the parties in the contested case.

At the PUC, informal settlements are reached through negotiations that occur outside of the formal



hearings process at any time before the commission makes its final decision in a contested case. Proposed settlements must be approved by the commission before they become final. Most of the cases are unanimously settled, however, the PUC can adopt non-unanimous settlements, which are settlements that are not fully agreed to by all the parties to the case.

This recommendation would statutorily mandate the PUC to adopt rules regarding settlement procedures. The PUC would also be required to include provisions to ensure that each party retains a right to a full hearing before the commission and judicial review on issues that remain in dispute. An issue of fact raised by a non-settling party may not be waived by the settlement and the non-settling party may use this issue of fact as the basis for judicial review:

STREAMLINING THE HEARINGS PROCESS TO PROMOTE EFFICIENCY

An abundance of time, effort and resources goes into conducting the hearings process in order to effectuate an outcome that is fair and equitable for all parties. Testimony during the Sunset review of the PUC indicated that streamlining the hearings process could provide considerable savings for both utilities and consumers.

Recommendation 15: Require hearings examiner to limit discovery.

Discovery in administrative proceedings serves much the same purpose as it does in judicial proceedings. Through discovery, parties obtain evidence for use in the proceeding and they seek to learn what information other parties have so that they may avoid surprising revelations in the hearing.

Discovery requests may require intensive effort for the parties to prepare and transmit information. This contributes to the cost and length of the proceedings. Limiting discovery as is done in state and federal court procedures would allow parties sufficient discovery to fully develop their positions, while focusing the issues in the case and reducing the rate case expense.

The PUC adopted Procedural Rule 22.142 to address this issue. The rule provides that the presiding officer may limit discovery for good cause, such as:

- Prevention of undue delay in the proceeding.
- Protection from unreasonably cumulative or duplicative discovery requests.
- Protection of a party or other person from undue burden, unnecessary expense, harassment or annoyance, or invasion of personal, constitutional, or property rights.

Recommendation 16: Streamline the process for notifying cities of proposed rate changes.

Current law requires utilities to file a rate package with the cities within their service areas when they seek to change their rates. A rate filing package may contain thousands of pages and in addition, utilities may have dozens of cities in their service area that must receive copies of these rate filing packages.

Although cities are entitled to information necessary for their review of the utilities' request, the detailed rate filing package is rarely reviewed by many cities. As a result, the requirement in PURA for utilities to file this information is costly for utilities and burdensome for most cities. This recommendation requires a utility to notify each municipality having original jurisdiction of its intent to change rates within 30 days of its filing of a statement of intent. The municipality then has 30 days to request the full rate filing package from the utility either for the city or on behalf of an interested resident of the city.

Recommendation 17: Authorize the PUC to focus parties on contested issues and any new issues which arise as a result of discovery.

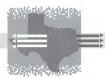
Allowing the PUC to identify the issues and facts before the hearing enables the PUC to clearly focus the debate in contested proceedings. This recommendation would model PUC proceedings after state and federal court proceedings.

The PUC adopted Procedural Rule 22.124 to address this issue. The rule requires each party that has not prefiled direct testimony to file a statement of position no later than three working days before the start of a hearing. Parties whose prefiled testimony does not address issues that a party intends to litigate are also required to file a statement of position. The statement of position should include a concise statement of the party's position in the proceeding, each question of fact, law or policy the party considers at issue and the party's position on each issue identified.

Recommendation 18: Allow hearings examiners to group parties, except OPC, with the same interests, with language to protect the rights of parties who are grouped to present witnesses.

Rate cases at the PUC generally involve multiple parties. Major rate cases may have as many as 50 parties, representing interests ranging from the affected utility and other utilities, large industrial and business consumers, cities, the state as a consumer, the public counsel, and various other consumer groups. The current practice at the PUC is to allow each of these parties the opportunity to present and cross-examine witnesses on its own behalf.

Allowing each party a separate opportunity to cross-examine witnesses leads to considerable duplication in the testimony during the hearing and contributes to the length and expense of the proceedings. This recommendation would allow the hearings examiner to group parties with similar interests to facilitate cross examination.



The PUC adopted Procedural Rule 22.105 which provides that the presiding officer may limit the number of representatives of aligned parties who conduct cross-examination of any particular witness during a hearing on the merits.

Recommendation 19: Require the hearings examiners to limit parties' time in presenting cases.

Proceedings at the PUC are often cumbersome and lengthy, and as a result, they are expensive for utilities and other participating parties. PURA limits the length of rate cases generally to 185 days, but it does not specifically address time frames within the process for parties to present their cases.

To resolve this concern, hearings officers would be allowed to limit the time that parties have to present their cases, as is done in state and federal court proceedings. This recommendation would not assign amounts of time for each party to present its case, but would give hearings officers the discretion of assigning different amounts of time for the different parties depending on their particular circumstances.

The PUC had adopted Procedural Rule 22.202(d), which authorizes the presiding officer to set reasonable times for a party to present evidence, establish the order in which parties will present evidence and conduct cross-examination and limit the number of witnesses to avoid cumulative or repetitive testimony.

Recommendation 20: Revise rate-setting treatment of utilities' federal income taxes in PURA as necessary, to ensure equitable treatment of both ratepayers and utilities.

Federal tax issues in dispute in the rate-setting process involve consolidated tax savings, disallowed and below-the-line-expenses, investment tax credits, and accelerated depreciation.

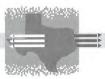
The parties in contention have advanced a variety of arguments to support their respective positions. The underlying arguments originate from two significantly different perspectives.

Tax savings are available to businesses under certain provisions of the federal tax code. Owners of public utility businesses believe they should have full opportunity to capture those tax savings, the same as owners of non-utility businesses. The tax code does not exclude utility businesses from participating in those savings. To utility owners, this is essentially a business matter between business owners and the IRS.

From the perspective of the federal government, so long as the correct net amount in taxes is remitted, any allocation of tax savings is not a federal concern. Any dispute over the allocation of those tax savings benefits therefore becomes a question for the state to resolve. A major dispute does exist between utility owners and utility ratepayers, and the disputants seek state support for their claims.

Ratepayers contend they should be required to reimburse the utility only for actual expenses, including any taxes actually paid by the utility. But if the utility is allowed to offset a tax liability, the tax is not paid; therefore, it should not be collected from ratepayers. From the perspective of ratepayers, a utility's rates are set high enough to ensure the utility owners receive a fair return on their investment. Any additional return, in the form of tax benefits, would constitute an excessive and unnecessary return, which would be unfair to ratepayers.

Existing state law has been interpreted by the courts to mean that these tax savings should be allocated to ratepayers. Legislators are now being asked to restate the law, and to ensure the result is equitable between ratepayers and utilities.



CHAPTER TWO

RECOMMENDATIONS

The following forty-two recommendations regarding the electric industry are discussed in the next section of the report.

Adoption by the committees of any recommendation in this report does not mean any related proposal is adopted. The recommendations are intended to stand alone; they are complete within themselves.

Recommendation 1: Integrated Resource Planning (IRP) Costs—Select a descriptive term for IRP costs and define it to express the legislature's intent regarding the extent externalities, particularly environmental concerns, are considered in the selection of generation sources and fuels. Address the extent of the PUC's authority to establish additional environmental compliance standards for utilities.

Recommendation 2: PUC Role in IRP—include in legislation the degree of involvement and oversight delegated to the PUC in integrated resource planning.

Recommendation 3: IRP Resource Selection—Establish the extent to which the PUC is authorized and required to prescribe, by rule, general guidelines to be followed by utilities in selecting or rejecting resources, with any appropriate limitations of PUC involvement delineated in the legislation.

Recommendation 4: Participation in IRP Proceedings—Authorize and require the PUC to establish appropriate rules which ensure the public is allowed to participate to an appropriate degree in the IRP process.

Recommendation 5: IRP Requirements—Prescribe in legislation the basic contents of IRP, and authorize the PUC to adjust those requirements to respond to significant changes in the industry.

Recommendation 6: Discovery—Allow existing discovery rules to prevail. However, in order to expedite the IRP hearing process, limit discovery in IRP proceedings to those issues which are related to IRP.

Recommendation 7: Time Limits for PUC Action—Set a reasonable time-table for the PUC to review and approve IRP plans, but authorize the PUC to extend the time period, within limits, when delay is unavoidable.

Recommendation 8: Participation in Certificate of Convenience and Necessity (CCN) Proceedings—Because the issuance of a CCN may impact upon a variety of interests and persons, require the PUC to establish, by rule, CCN procedures which are compatible with an expedited IRP process, but which also allow appropriate participation

by affected persons. Impose a time limit within which to conclude the CCN proceeding.

Recommendation 9: Non-Rate-Base Plants—The Committee recommends further study be made of the proposal to allow a utility to operate non-rate base plants.

Recommendation 10: Integrity of Bidding Process In Resource Selection—Require the PUC to ensure the integrity of the bid process, and authorize the PUC to appoint an independent monitor to ensure the integrity of the process where necessary and appropriate, with bidding fees established to cover the costs of such monitor.

Recommendation 11: Cost Caps for Utility Plants—The Committee recommends that further study be made of the Cost Cap proposals.

Recommendation 12: Cost Recovery—Authorize the PUC to allow expedited recovery of all verified, reasonable costs expended by a utility for DSM programs and purchased power. Authorize the PUC to allow the capitalization of Demand Side Management (DSM) costs.

Recommendation 13: Incentives (e.g. Mark-ups)—Authorize the PUC to establish by rule appropriate incentives for DSM and purchased power provided such incentives are directly tied to and commensurate with measurable benefits received by the utility's ratepayers.

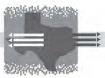
Recommendation 14: Renewable Energy—Authorize the PUC to establish by rule requirements to promote the cost effective use of renewable energy, and to recognize a utility's superior performance by allowing a greater return on equity.

Recommendation 15: Affiliate Transactions—Retain existing levels of greater scrutiny for all affiliate transactions except for an electric utility's EWG affiliate, where some appropriate level of adjustment to scrutiny levels may be necessary to facilitate competition.

Recommendation 16: Revocation of CCN—Authorize the PUC to revoke a CCN under certain conditions, with safeguards included for utility owners.

Recommendation 17: Transmission constraints—Assign appropriate responsibility in the IRP process to the PUC and to utilities, respectively, to identify transmission constraints.

Recommendation 18: DSM efforts—Establish a reasonable balance between utility discretion and PUC oversight to achieve appropriate levels of DSM efforts.



Recommendation 19: IRP Exemptions—Authorize the PUC to exempt utilities from IRP requirements when such exemption is shown to be appropriate and in the public interest.

Recommendation 20: DSM for Renters and Low Income Consumers—Direct the PUC to encourage the development in IRP of cost-effective DSM which appropriately addresses the needs of renters and low-income consumers.

Recommendation 21: Moving Generating Plants Out of Rate Base—Direct the PUC to ensure that existing plants are not moved from rate base to the detriment of ratepayers.

Recommendation 22: Cost Comparisons—Require utilities, prior to making substantial changes to existing plants, to report to the PUC costs of proposed changes in comparison to costs of available alternatives.

Recommendation 23: Intervenors' Recovery of IRP Intervention Expenses—Rely on the Public Counsel and the PUC to represent the public's interest in IRP, rather than create additional representation to be paid by ratepayers.

Recommendation 24: Competitive Pricing Fears—Authorize the PUC to respond to complaints involving predatory pricing.

Recommendation 25: Solicitations Outside the IRP Process—Include specific provisions in the IRP legislation to allow appropriate solicitations outside the IRP process.

Recommendation 26: Certification and Cost Recovery for Purchased Power And DSM Costs—Ensure that any requirements involving contract certification and cost recovery for purchased power or DSM costs include reasonable review by the PUC, with ample opportunity for interested parties to participate in the process.

Recommendation 27: CCN Exemption for R&D (research & development) and Small Generating Plants— Authorize the PUC to establish appropriate proceedings for such facilities, with the requirement that affected ratepayers and other affected parties have ample opportunity to participate in the proceedings.

Recommendation 28: Mergers and Acquisitions—Ensure that mergers and acquisitions are consistent with the public interest by delegating appropriate authority to the PUC.

Recommendation 29: Timely Fuel Cost Recovery—Require the PUC to develop rules to allow timely fuel recovery. Adopt SB 498 language, Sec. 43 (g), as agreed to by working group members: Allow the PUC to streamline the process, including a "with or without hearing" option.

Recommendation 30: Electric Cooperatives. Partially deregulate electric distribution cooperatives, with consumer safeguards maintained—as agreed to by the working group members.

Recommendation 31: Exempt Wholesale Generators—Authorize EWGs and power marketers to operate in Texas, with appropriate limitations and safeguards included in the legislation.

Recommendation 32: Retail Wheeling—Authorize the PUC to allow limited forms of self-service retail wheeling within a limited distance as a pilot program. Put a hold on all other forms of retail wheeling pending results of the pilot program.

Recommendation 33: Purchased Power in Non-contiguous areas. Allow the PUC to resolve such complaints.

Recommendation 34: Targeted Return on Equity—Revision of the rate-setting process for electric utilities—Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties.

Recommendation 35: Assignment of financial liability for stranded investment—Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties.

Recommendation 36: Transfer of assets—Retain PURA safeguards which ensure that utility assets are not transferred to the detriment of ratepayers.

Recommendation 37: Restrictions on co-generation— Do not enact legislation which would be incompatible with federal laws encouraging co-generation; defer consideration of co-generation limitations until the proposals are carefully reviewed and fully discussed by interested parties.

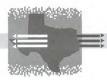
Recommendation 38: Deregulation of wholesale power rates—Ensure that wholesale power rates are appropriately regulated; establish a regulatory path which will achieve less regulation commensurate with the development of effective competition.

Recommendation 39: PUC jurisdiction—Do not extend PUC jurisdiction to books and records of non-utility competitors. Instead, consider measures to limit public disclosure of sensitive information affecting competing power producers subject to PUC jurisdiction as utility affiliates.

Recommendation 40: Proposal to impose limitations on Sec. 42 proceedings—Ensure that essential ratepayer protections provided under Sec. 42 are not diminished.

Recommendation 41: Requiring the PUC to include intangible assets in a utility's rate base—Rather than statutorily require the PUC to include intangible assets, continue to allow the PUC to balance the interests of ratepayers and shareholders in determining whether assets are "used and useful".

Recommendation 42: Changes in city jurisdiction over utilities—Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties—especially the cities. ■



CHAPTER TWO

ELECTRIC UTILITY ISSUES

hat's Broken? In setting out to review and amend the PURA, the following questions naturally occur to most observers: If you intend to fix PURA, what's broken about it? And what caused it to break?

The answers to those questions—at least as to PURA provisions which apply to electric utilities—may be readily found in a quick review of the electric utility industry's recent background, and the current pressures affecting those who are most directly involved in the industry. Pressure for change is coming from:

Changes at the federal level, including changes in environmental law, and in the philosophy of the role of competition in this industry;

New technology in renewable energy sources;

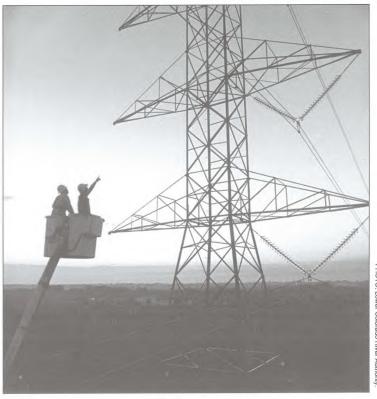
Independent power producers who operate in most states—and want to operate in Texas. Their argument is that competition will lower rates;

Large industrial customers want lower rates; they see some potential for their rates to be lowered if the generation market is opened up to competition.

Integrated Resource Planning (IRP) A number of the interested parties want changes made in the industry's basic relationship with the PUC, including the role of the PUC in resource selection. When it's time to produce more electricity, what source or source mix should be used? Coal, gas, wind, sun; and DSM (demand side management); what size plants; what sort of fuel contracts; how much to emphasize environmental concerns, beyond the requirements already expressed in our existing environmental protection laws; how much emphasis to put on renewables and DSM; how much latitude for utilities in the process; what level of participation by the public in the process.

These are just a few of the many questions involved in this general subject area called Integrated Resource Planning, or IRP.

Competition The question of competition in power generation raises another range of issues and debates, which will be addressed in the next section.



BACKGROUND

A recent New York Times article was titled "Electric Utilities Brace for Inevitable Competition". For a number of reasons, the threat of competition creates a great deal of uncertainty in the industry. Utility managers are scrambling to protect their resources and their revenues, and their approaches vary widely.

One approach that has great potential is to seek protection from government. In the face of great uncertainties about the impacts of competition, the industry is not without allies in seeking protection from competition. The nature of the protection sought varies with the interest of the ally, as might be expected.

Residential consumers believe the larger industrial consumers will be the beneficiaries of any lower cost power produced by competing power generators. The fear is that residential ratepayers will end up paying for the utilities' higher cost generating plants, with little or no help from large industrial customers.

Industrial customers compete with their counterparts



in other states. Since wholesale power generation in other states results in lower power costs for those industrial competitors, industrial customers in Texas seek those same cost advantages. At the same time, those who produce power as independent power producers in other states seek similar opportunities to compete with utilities in Texas.

Advocates of generating power from renewable resources (wind and sun) have experienced considerable apathy, if not opposition, to any expansion of those resources. Criticisms are based on expense, relatively modest power output, unreliable output, and distance from the market. If competition in the production of wholesale power does result in lower prices, renewable generation may face even greater hurdles in gaining market share.

Demand side management activities (DSM) already rely to a great degree on government to impose some degree of DSM responsibility upon electric utilities. Utilities make money by selling more electricity rather than less. The objective of DSM is to save energy through proper conservation and efficiency measures. The result of DSM is therefore less production of electricity, less in sales, less in profits. DSM advocates seek to find incentives to induce utilities to aggressively support DSM. They are faced with the question of how DSM will fare in a more competitive power market.

Those who view utility regulation as an opportunity to more closely control emissions which are detrimental to the environment are also left with greater uncertainty. How closely might the independent power producers be regulated in comparison to the comprehensive regulatory scheme which now exists for electric utilities? As utilities begin to compete with independent generators, might regulation over the utilities' generation activities be relaxed in the name of competition and a "level playing field"?

Utilities themselves foresee a shrinking rate-base producing less revenue and lower profits for their share-holders, as competitors enter their now protected markets. They seek help from the government in a number of ways, all designed primarily to avoid loss of profits.

Texas' electric utility industry is facing the possibility of fundamental change. After providing comprehensive services to homes, farms, businesses and industry for most of the century, the utilities' regional monopolies are facing competition.

In many parts of Texas, consumers enjoy rates which are under the national average. Many of the state's investor-owned utilities have been well regarded on Wall Street. So, what is it that's broken?

Power in Texas: The industry's structure faces change because new technologies are making it possible for customers—especially large industrial users—to

reduce their electric bills and for new kinds of electric companies to compete with utilities. Recent changes in federal environmental law and power regulation also have increased the pressure to reform utility regulation. The interaction of these forces makes Texas' electric utilities vulnerable but also creates some special opportunities for a number of players, including the utilities.

Electric power in Texas is big business, employing more than 44,000 workers and grossing almost \$15 billion in yearly revenues. Texas is the nation's largest consumer of electricity. Of the state's 7.7 million customers, 87 percent are residences, 11 percent are commercial and the rest, almost 60,000, are industrial. Annual usage averages about 1.5 million kilowatt hours (kWh) for industrial customers, 70,000 kWh for commercial users and 12,000 kWh for residences. Commercial and residential use is much higher during the day than at night, while industrial users draw a more steady load.

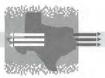
Texas utilities sell about 240 billion kWh a year, about 15 percent of which flows through the dozens of municipally owned systems and cooperatives. These public systems serve almost 2 million Texas households, or three out of 10 residential users. The municipal utilities of San Antonio and Austin are among the nation's 10 largest publicly owned generators of electricity, but cities as small as Seguin have some generating capacity of their own. Other customers are served by investor-owned utilities (IOUs), which operate for profit.

The state's major IOU's are fairly diverse. Texas Utilities Electric Co. and Houston Lighting and Power Co. are among the nation's 10 largest private utilities by almost any measure. Gulf States Utilities Co., suffering financial hardship, merged with an out-of-state utility in 1993. Mid-sized Southwestern Public Service Co. of Amarillo can boast of the second highest return on equity in the country and the lowest electric rates in Texas. El Paso Electric Co., on the other hand, has become the second investor-owned electric utility to go bankrupt in modern times.

While Texas resembles the U.S. in its distribution of customers, revenues and consumption, most of Texas' peak loads occur in the summer air-conditioning season instead of the winter heating season. Texas electric rates average from one-half to nine-tenths of a cent less than the U.S. averages across customer classes.

IOUs provide 76 percent of electricity nationwide but 85 percent of electricity in Texas. More important, IOUs garner 96 percent of all industrial revenues in Texas, versus 79 percent nationally. Texas IOUs claim eight times as many industrial customers as publicly owned utilities and 25 times as much revenue from those users. IOUs charge, in general, a little more per kWh for residential and commercial service, while their industrial rates are a little lower.

Texas' huge generating capacity gives it a prodigious



appetite for fuel. Texas uses 90,700 short tons of coal annually to generate power - more than any other state and almost twice as much as second-ranked Ohio. Lignite from Texas, the nation's fourth largest producer, accounts for about 60 percent of the state's coal consumption. Virtually all the rest is low-sulfur subbituminous coal from Wyoming.

Texas also leads the U.S. in the use of natural gas for power generation, burning more than 1 trillion cubic feet per year—more than 40 percent of all gas used in the U.S. for that purpose. In contrast, Texas uses less than 1 percent of the oil burned for power generation nationally. Texas utilities use oil almost solely as a back-up fuel for natural gas-fired plants.

Gulf States' and El Paso Electric's troubles are generally attributed largely to their over-involvement in troubled nuclear projects in Louisiana and Arizona, respectively. El Paso has also been criticized for its involvement in other ventures not related to the electric utility business. Otherwise, these utilities pursued strategies similar to those of other utilities, which have served Texas ratepayers well for a long time. New economic, technological and legal forces may change all that.

Cost concerns: As industries in Texas and the U.S. increasingly compete in an international market, they seek to reduce their costs to maintain profit margins while lowering prices. Because some large companies use huge amounts of electricity, power use is an obvious target for cost reduction for those companies.

How can industrial customers save money on electricity if Texas already offers low rates? One way is by generating their own. Texas companies, especially chemical firms with their huge requirements for heat and power, are pursuing cogeneration with enthusiasm. Cogeneration saves a customer money by using heat from the manufacturing process to generate electricity. (Or use heat from the generating process to support manufacturing.) Under the right circumstances, a cogenerator can sell excess power to the utility and offset the cost of building and operating a facility.

Texas cogenerators produce more electricity than those in any other state except California, providing a significant percentage of Texas' total power generation. More and more cogenerators are using a new power source, the combustion turbine—actually a jet engine—because the relatively small units can be built relatively quickly and inexpensively and fueled currently by cheap, clean and available natural gas.

Another way to save money is to pay even lower rates. Large customers would like to be able to shop for electricity from several providers—such as other utilities or even their own nearby plants—in a so-called retail market. Present law effectively prohibits this, so the large consumers of electricity and independent power producers seek to change it. Not surprisingly, utilities oppose retail sales which would cut into their

profits, and consumer advocates oppose retail sales which would cause their own rates to increase.

Utility regulation: Since its inception around the turn of the 20th century, the electric power industry's monopoly status has prevented unnecessary duplication of facilities and generating capacity and allowed individual companies to realize the economies of scale associated with a large generating plant. Because competitive market forces could not be relied on to keep prices in check and ensure good service, governments at all levels have set up regulatory mechanisms.

States conduct the basic oversight by regulating utilities' quality of service and rates of return. Since 1975, the Public Utility Commission (PUC) of Texas has had the authority to set quality standards and prices for electricity sold by each utility. Rates are set to cover the utility's costs in providing electricity and to return a profit to IOU shareholders. The PUC determines not only what a fair rate of return on investment should be but also what costs are legitimately and prudently incurred by the utility.

Traditional regulation has served Texas and its utilities fairly well—the state generally enjoys low rates and abundant generating capacity—but it also produces some less desirable effects.

Because total profit is generally limited by the size of asset base, the utility can increase its profits only by adding capacity. Thus, the utility has a powerful incentive to build as many plants as it can justify. The long lead times needed to site, plan, permit and build a large power plant—six years for a coal or lignite plant and mine, 10 to 20 years for a nuclear plant—encourage utilities to commit to construction now to meet demand that may not materialize for another two decades, and to build very large plants with long service lives.

Critics contend that traditional regulation has resulted in some overcapacity, inefficiency, quarter to half-century planning horizons, intergenerational debt and artificially low prices that still exceed the costs of self-generation for some users. Recent changes in federal environmental law and power regulation may hasten the obsolescence of some parts of Texas' regulatory system.

Policy considerations: New air-pollution laws mandate reductions of emissions, particularly sulfur compounds, at the source. Some plants may have to make burner modifications or even switch fuels in the future. Under those circumstances, compliance will be expensive

Gas-fired units emit far less sulfur and nitrogen oxides than coal but do produce carbon dioxide. The U.S. has made international commitments to reduce carbon dioxide emissions—not immediately, but within the design lifetime of currently operating plants. Even with the new standards, electric power generation is expected to remain one of the leading sources of air pollution.

Environmentalists look to regulatory reform to



encourage conservation, efficiency and cleaner sources of power. Some propose including the environmental and social costs of power generation in the cost of new plant construction, thereby influencing the utility's selection of generation options. Such costs would be monetized by calculating the dollar value of additional health-care costs in areas downwind of large emission sources, the economic damage to an area declared in nonattainment of air-quality standards and the long-term cost of storing nuclear waste. Raising the cost and price of electricity generated by dirty sources would make renewable energy sources more attractive.

Another proposal would provide better return on investment for utilities' demand-side management programs. Now, conservation programs such as rebates for weatherization and efficient home appliances save a utility from the costs of building a new plant but add little or nothing to the utility's profits. Treating demand-side management as an investment would make it much more valuable to a utility.

Some observers believe the path that appears most promising is the creation of a wholesale market for electricity, with traditional regulation replaced by increased competition. Some states and the federal government are taking the first steps down that path.

The federal government has expanded the power of the Federal Energy Regulatory Commission (FERC) to require utilities to allow, for a fee, any power producer to use utility transmission lines to transport or "wheel" power to another utility. The availability of transmission facilities effectively creates a market for wholesale power. Texas utilities do buy power, either because they do not produce their own, or to help ensure reliability of their distribution system, but utilities cannot make a profit on their power purchases. The basic regulatory principle offers a return on investment, not on electricity purchased from others. Utilities would like to see the laws changed to allow mark-ups on purchased power.

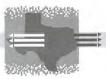
Integrated resource planning (IRP) requires a utility to consider a wide range of resources that work together to satisfy the demand for power. In 1993, the Texas Legislature came close to passing an omnibus regulatory bill that would mandate IRP. This year, the PUC voted to defer further work on its IRP proposal while the Legislature continues to pursue broad regulatory reform.

Regulatory processes to implement IRP can be tailored to support social goals. For example, a least-cost criterion can be used to steer utilities to economically efficient generation. In a wholesale market, non-utility generators using new technologies would presumably be able to compete with the utility itself. Environmental goals can be promoted by monetizing environmental costs and by providing the same profit-making opportunities for demand-side management and purchased power as for building new generating capacity.

Current proposals: Some reformers suggest going



PHOTO: Lower Colorado River Author



beyond wholesale markets and IRP to the creation of retail markets and sweeping deregulation. California has proposed letting not only utilities but the ultimate users of electricity choose their own suppliers, beginning with large consumers in this decade and followed by households a few years later.

Others foresee a future in which the power industry is vertically de-integrated, with different enterprises providing the generation, transmission and distribution functions of the present utilities. A similar restructuring has occurred in the natural gas industry since the mid-1980s. At the wholesale level, electricity would become a commodity, with generators competing mainly on price and reliability. Transmission and distribution firms would tailor their services to the individual consumer's needs.

Distributors might offer uninterrupted or extra-clean generation of power at a premium price and discount less reliable service. Using modern computer communications, distributors could charge less for electricity used during off-peak hours, or at usage rates that fall below a negotiated level. Consumers could exercise their environmental commitment by buying only "green" electricity from solar and wind generators. The ability of consumers to choose their supplier could force prices down.

The problem with a rapid transition to open markets is the uneven distribution of benefits and costs - and the costs could be devastating for some utilities and their residential customers. Several of Texas' utilities are already suffering financially from their investment in nuclear projects that turned out much more costly and much riskier than originally envisioned. Even the most profitable utilities' huge investments in plants and wires have hardly begun to pay for themselves. If existing utilities lose their biggest customers to new generators, the remaining customers may have to pay higher rates, or the utility's shareholders may realize lower dividends and stock prices, or there will be some imposed "sharing" of the costs.

IRP and a wholesale market have become the main focus of reform because they accommodate the most pressing changes while providing opportunity to reduce the associated risks. These new regulatory models offer not only a hedge against the risk of huge losses by existing utilities and residential rate shock, but also a way for Texas to exploit its plentiful natural gas and renewable energy, its unmatched—and largely untapped—capacity for conservation and the financial depth of its generating companies.

Integrated Resource Planning. Many of the recommendations are directly related to an attempt to formalize and improve Integrated Resource Planning (IRP) in Texas. IRP is a planning and selection process for new energy resources which evaluates the full range of alternatives . . . in order to provide adequate and reliable service . . . at the lowest system cost. The process shall take

into account necessary features for system operation, such as diversity, reliability, dispatchability, and the ability to verify energy savings achieved through energy conservation and efficiency . . . and shall treat demand and supply resources on a consistent and integrated basis.

After Senate Bill 498 failed to pass, the PUC resumed its rulemaking effort on IRP in the fall of 1993. In early 1994, the PUC staff prepared a draft rule, briefed interested parties on the rule and solicited comments. Interested parties were unable to reach consensus on any version of the rule. In May, 1994, the commissioners voted 2 to 1 against publishing a proposed rule on IRP. The PUC staff was requested to prepare a rule which would deal with utilities' solicitations of resources to meet the electric power needs of their customers.

Some of the many sub-issues contained within the larger issue of IRP include:

Cost of Resources
Public Participation in IRP
Contents of a Preliminary
Plan
PUC Time To Act On
An IRP
Non-Rate Base Utility Plant
Cost Caps
Incentives; Markups
Affiliate Transactions
Transmission Constraints
DSM Exemption
Revocation of A CCN

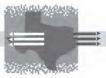
Statewide Plan/Report
Guidelines for Selecting
Resources
Discovery
Granting of CCNs
Monitoring of Bids
Received in an IRP
Solicitation
Incentives; Cost
Recovery
Renewables
Demand-Side
Management (DSM)

RECOMMENDATIONS

Recommendation 1: IRP Costs - Select a descriptive term for IRP costs and define it to express the legislature's intent regarding the extent externalities, particularly environmental concerns, are considered in the selection of generation sources and fuels. Address the extent of the PUC's authority to establish additional environmental compliance standards for utilities.

Strong disagreement exists among the parties over which term to use to describe the costs of power sources in an Integrated Resource Plan. Inherent in the choice of a description of IRP cost is the question of how environmental "externality" costs will be treated. "Externalities" in this context generally refers to indirect, related costs imposed on society in the process of generating electricity. An example is the impact on the environment from the burning of coal. The debate centers around the degree to which those impacts should be considered in resource selection, how to "monetize" or place a value on those impacts, and whether the PUC environmental concerns should go beyond existing federal and state laws governing emissions.

Recommendation 2: PUC Role in IRP - Include in leg-



islation the degree of involvement and oversight delegated to the PUC in integrated resource planning.

How much planning should be done by the PUC, as opposed to essentially reporting the planning efforts of individual utilities? Should an Integrated Resource Plan be the utility's plan, the state's plan, or some combination of the two? Should the plan include Commission goals? The IRP language prepared by the staff for discussion purposes contemplates more of a role for the PUC than merely reporting what the utilities do. That language is: "The Commission by rule shall adopt and periodically update a statewide integrated resource plan that includes the Commission's long-term resource planning goals."

Recommendation 3: IRP Resource Selection - Establish the extent to which the PUC is authorized and required to prescribe, by rule, general guidelines to be followed by utilities in selecting or rejecting resources, with any appropriate limitations of PUC involvement delineated in the legislation.

At issue here is the degree of oversight and involvement of the PUC in utility affairs—from the utilities' perspective, or the degree of public interest and consumer safeguards—from the perspective of others.

Recommendation 4: Participation in IRP Proceedings - Authorize and require the PUC to establish appropriate rules which ensure the public is allowed to participate to an appropriate degree in the IRP process.

Those who are concerned about limitations proposed by others with respect to participation in the IRP process include utilities, who fear prolonged hearings caused by those they consider to be self-serving intervenors, environmental advocates, who believe environmental concerns will not be adequately addressed if participation is limited, consumer advocates, representing an array of consumer interests, and competitors, seeking the proverbial level playing field. As a matter of public interest, the public should have ample opportunity to participate.

Recommendation 5: IRP Requirements - Prescribe in legislation the basic contents of IRP, and authorize the PUC to adjust those requirements to respond to significant changes in the industry.

Parties have debated whether legislation should definitively prescribe the contents of a preliminary plan. Various parties suggest legislation should include:

- (1) the utility's forecast of future demands;
- (2) an estimate of the energy savings and demand reduction the utility can achieve during the 10-year period by use of demand-side management resources and the range of possible costs for those resources;
- (3) if additional supply-side resources are needed to meet future demand, an estimate of:
 - (A) the amount and operational characteristics of the additional capacity needed;

- (B) the types of viable supply-side resources for meeting that need; and
- (C) the range of probable costs of those resources;
- (4) if necessary, proposed requests for proposals for demand-side or supply-side resources, or both;
- (5) the specific criteria the utility will use to evaluate and select or reject those resources, which criteria may deviate from the general guidelines on a showing of good cause;
- (6) the methods by which the utility intends to monitor those resources after selection;
- (7) the method by which the utility intends to allocate costs;
- (8) any proposed incentive factors; and
- (9) any other information the Commission requires.

Recommendation 6: Discovery - Allow existing discovery rules to prevail. However, in order to expedite the IRP hearing process, limit discovery in IRP proceedings to those issues which are related to IRP.

During contested proceedings at the PUC, parties are required to provide relevant information to other parties, upon request. The issue here is whether requests for information (discovery) should be limited to anything more or less than the normal "relevant" information, as determined by a presiding administrative law judge.

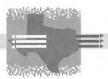
The question is whether to rely on existing rules governing the relevancy of information which is discoverable, and upon the judgement of presiding ALJs, or to set out in PURA what information is discoverable in an IRP hearing.

For example, discovery could be limited to an issue relating to the development of the preliminary plan, a fact issue included in the preliminary plan, and other issues the Commission is required to decide relating to the preliminary plan.

Recommendation 7: Time Limits for PUC Action - Set a reasonable time-table for the PUC to review and approve IRP plans, but authorize the PUC to extend the time period, within limits, when delay is unavoidable.

How much time should be allowed for the PUC to act on an IRP request for approval? Utilities propose that not later than the 180th day after the date the utility files the preliminary plan, the Commission shall issue an interim order on the preliminary plan. Otherwise, the plan would be approved by operation of law.

After preparing and filing an Integrated Resources Plan proposal with the PUC, a utility is interested in receiving review and approval of that plan with minimum expenditure of time and expense. The PUC and other participants are also in favor of holding the time to a minimum, but consider a full review and deliberate approval to be the primary considerations. Should the PUC be strictly held to a 180 day period for its review and approval of a utility's IRP? If delay is unavoidable,



would approval of the plan by operation of law be in the public interest?

Recommendation 8: Participation in CCN Proceedings - Because the issuance of a CCN may impact upon a variety of interests and persons, require the PUC to establish, by rule, CCN procedures which are compatible with an expedited IRP process, but which also allow appropriate participation by affected persons. Impose a time limit within which to conclude the CCN proceeding.

A CCN (Certificate of Convenience and Necessity) is issued by the PUC to authorize a utility to construct necessary generating plants, transmission lines, and other facilities. A number of parties express concern over the opportunity for all affected citizens to take part in the IRP and CCN process, including those who may not be customers, but nonetheless may be affected by the choice of plant type and site.

Recommendation 9: Non-Rate-Base Plants - The Committee recommends further study be made of the proposal to allow a utility to operate non-rate base plants.

Should a utility be allowed to build and operate its own non-rate base generating plant to meet IRP demand?

Traditionally, the cost of a utility's new generating plant would be added to the utility's rate base, and a reasonable return on that cost, or investment, would be allowed in terms of the level of rates collected from ratepayers.

A "non-rate base utility plant" is a new concept proposed by the utilities, in an attempt to compete with owners of non-utility generating plants. This concept would allow a utility to build a plant to supply electrical power to itself, for its customers, as an independent power producer might supply power to that utility for its customers. Instead of receiving a return on its investment for the cost of the plant in its rates, the utility would charge for the power produced by that plant, presumably at market prices.

The proposal generated considerable discussion and controversy.

If the concept of "non-rate base" units owned by utilities is incorporated in PURA, utilities propose that approval of the utility's "bid" and inclusion of such unit in the utility's approved integrated resource plan grants the utility the right to construct the unit without further Commission review or oversight. The proposal also includes the following concepts: the cost that the utility incurs building the approved "non-rate base" generating unit shall not be included in invested capital; the utility shall instead recover through rates the price of the capacity and energy specified in the "bid" approved by the Commission in the same general manner that the utility recovers the cost of purchased power,

including the recovery of such costs through a cost recovery factor; and should the actual cost to construct the "non-rate base" generating unit differ from that anticipated at the time the "bid" was approved by the Commission, the difference, along with any federal income tax consequences thereof, shall be borne entirely by the shareholders of the utility; and finally, a utility shall not be subject to a ratemaking disallowance for excess capacity as a result of completing and providing power from an approved "non-rate base" unit.

Recommendation 10: Integrity of Bidding Process In Resource Selection - Require the PUC to ensure the integrity of the bid process, and authorize the PUC to appoint an independent monitor to ensure the integrity of the process where necessary and appropriate, with bidding fees established to cover the costs of such monitor.

In the IRP resource selection process envisioned by the association that represents electric utilities, the utility would receive bids for new plants, including bids from their power generating affiliates. The utility would evaluate each bid submitted, and could reject any or all bids in accordance with the criteria specified in the preliminary plan.

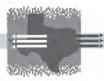
Various members of the working group expressed concerns over the prospect of affiliates receiving information concerning other bids, or receiving preferential treatment in the selection process. Authorization for the PUC (or the utility) to appoint an independent evaluator, or monitor, was discussed, with a bidding fee to cover the cost of the monitor. Precisely how the monitor would be selected and what the duties would be were not resolved.

Some parties favored solutions which authorized the utility to select the winning bid, with the PUC assuring the confidentiality of bids, or allow the Commission to retain an independent monitor.

Recommendation 11: Cost Caps for Utility Plants - The Committee recommends that further study be made of the Cost Cap proposals.

Under existing rate base treatment, the utility is allowed to recover all prudent costs of a used and useful generating plant in rate base, regardless of the estimated and actual costs. Under Cost Caps, the amount allowed in rate base would be limited to the capital, operating, and fuel costs bid by the utility and relied upon by the PUC in approving a CCN for the unit. If the bid costs are to be used, though, that means the utility would benefit from any savings in building the plant for less than the bid estimates. Rates would be based on the higher estimated or bid amount of the plant, rather than on the lower actual amount.

Should the prudent actual costs of a plant be included in rate base, regardless of bids or the bid costs of the plant, and regardless of actual costs?



Recommendation 12: Cost Recovery - Authorize the PUC to allow expedited recovery of all verified, reasonable costs expended by a utility for DSM programs and purchased power. Authorize the PUC to allow the capitalization of DSM costs.

The question is whether a utility should be authorized timely recovery of its costs from ratepayers as an incentive for it to aggressively pursue DSM and lower cost power sources?

A utility's rates are set so as to allow the utility to recover its reasonable costs and a reasonable return on its investment. The rate setting process is not entirely a science, however, since historical and factual data must be updated and refined through the use of estimations, projections and judgement.

As changes in costs occur after rates are set, both ratepayers and utilities seek to ensure that current rates reflect any significant cost changes which are favorable to their interests.

A key concern is the timing of adjustments to rates. Utilities favor speedy adjustments for increases in their costs. A competing interest is protection for ratepayers. The adjustments must be scrutinized (by the Commission) to make sure they are valid, and that increases are not readily granted to the utility without some reasonable review of offsetting cost decreases favoring ratepayers. Another consideration is the avoidance of frequent swings in rates, to give some stability of expectation and ability to plan budgets for utility customers.

The emerging competitive market, where independent power producers offer power to utilities at market prices, and the growing interest in more efficient and conservative use of electricity through DSM efforts raise new issues for the industry.

Utilities earn profits by selling, rather than by conserving electricity. A large portion of their revenue is earned by building and operating power plants, rather than by buying power from others and merely operating as a distributor of power.

Utilities ask "what incentive is there for us to promote DSM or to buy power from our power generating competitors?" Their answer is for the Legislature to establish specific requirements in PURA for speedy recovery of such costs. Consumers agree that full recovery should be allowed, but only if they are verified and reasonable costs.

Recommendation 13: Incentives (e.g. Mark-ups) - Authorize the PUC to establish by rule appropriate incentives for DSM and purchased power provided such incentives are directly tied to and commensurate with measurable benefits received by the utility's ratepayers.

Should utilities be allowed to add a mark-up on pur-

chased power costs, to be passed on to ratepayers, as an incentive to purchase lower cost power from other sources? Should mark-ups be allowed on DSM (demand side management) as an incentive for the utility to promote DSM savings?

As previously discussed, utilities make money by generating the power they distribute. That fact acts as a disincentive for them to purchase power from independent power producers, even though that power might be less costly than power produced by the utilities.

A mark-up on purchased power is proposed by the industry to allow them to replace revenue lost if they no longer generate their own power.

Utilities raise an additional consideration: Not only is there no profit gained by buying power from other generators, the addition of new power sources raises the question of "stranded investment." That is, if a utility buys cheaper power from an independent producer, what happens to the utility's own plants if the new sources of power cause those plants to become under-utilized?

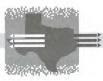
More to the point, the stranded investment issue is "who pays for the utilities' idle generating plants?" Will it be the shareholder owners of utilities, captive customers of the utilities (primarily residential and small business customers), all consumers of electricity, through some pricing mechanism whereby all are required to contribute to help defray stranded investment costs, or some sharing of costs between ratepayers and shareholders.?

Another party urges "a rate mechanism and structure which makes conservation as profitable to the utility as investment in new generation, transmission, and distribution facilities, taking into account the differences in risk and capital expenditures.

Recommendation 14: Renewable Energy - Authorize the PUC to establish by rule requirements to promote the cost effective use of renewable energy, and to recognize a utility's superior performance by allowing a greater return on equity.

Language in the conference committee version of SB 498 required the Commission to "ensure the development of renewable energy technologies. . ." The debate centers around the question of cost and government preference for a particular source of power. Proponents of renewable energy facilities assert that cost is no longer a valid issue; that energy is available from those type facilities at competitive prices. Resistance to renewables includes questions about reliability, transmission access, and the relatively smaller quantities of power available from a single renewable source.

The core issue is whether state policy should encourage or perhaps even mandate the production of power through the use of renewable resources, such as wind and solar facilities?



Recommendation 15: Affiliate Transactions - Retain existing levels of greater scrutiny for all affiliate transactions except for an electric utility's EWG affiliate, where some appropriate level of adjustment to scrutiny levels may be necessary to facilitate competition.

Existing law requires stringent oversight of affiliate transactions, because an affiliate relationship offers greater opportunity and potential for abusive self-dealing, at the expense of monopoly customers. In order for utilities to compete on "a level playing field" with independent power producers, utilities contend their affiliated power producers should not be subjected to any more Commission scrutiny and compliance requirements than independent producers.

One option might be authorization for the affiliate to sell to unaffiliated parties at prices lower than the prices charged to the utility, provided (1) those lower prices are in no way subsidized by the utility's ratepayers, (2) affiliate sales comply with state and federal laws, and (3) the utility grants no undue preference to any person in connection with the purchase, sale or transmission of electric energy at wholesale.

Recommendation 16: Revocation of CCN - Authorize the PUC to revoke a CCN under certain conditions, with safeguards included for utility owners.

After a utility receives PUC clearance to construct a generating plant (the granting of a Certificate of Convenience and Necessity, or CCN), should the PUC have the power to revoke the CCN and stop the construction?

A provision of conference committee SB 498 would have allowed the PUC to revoke a CCN if it found the construction of a plant was no longer the lowest cost option, considering the cost to complete the plant relative to other options. If the PUC did stop construction and revoke a CCN, it would be required to provide appropriate treatment for all of the utility's prudent expenditures related to the plant, to ensure utility owners were protected from any "taking of property".

Recommendation 17: Transmission constraints - Assign appropriate responsibility in the IRP process to the PUC and to utilities, respectively, to identify transmission constraints.

A competitive power generation market will be dependent upon the availability of transmission facilities with sufficient capacity to transmit power from generators to buyers, throughout the state.

How much oversight of transmission capabilities should be assigned to the PUC in the IRP process, as opposed to reliance upon individual utilities to provide adequate transmission capabilities?

Recommendation 18: DSM efforts - Establish a reasonable balance between utility discretion and PUC oversight to achieve appropriate levels of DSM efforts.

DSM, or demand-side management programs seek to reduce consumers' present demand for power through various efficiency and conservation efforts. If demand is reduced, existing power is then available for newly created demand (e.g., that of new customers moving into the service area). Supplying new demands by reducing old demands allows the utility to avoid or delay the construction of new power plants, saving all customers the costs of those plants.

If the public interest calls for promotion of DSM activities, the next question is how much discretion should be left with the utility; how much oversight assigned to the PUC?

Recommendation 19: IRP Exemptions - Authorize the PUC to exempt utilities from IRP requirements when such exemption is shown to be appropriate and in the public interest.

DSM efforts involve the reduction of electrical use by end-users, through efficiency and conservation measures. Wholesale suppliers have no direct contact with the end-users, and no effective means to compel their retail utility buyers to institute DSM measures.

This proposal would therefore grant IRP exemptions for "wholesale" utilities, and would provide that "no utility shall be required to solicit demand-side resources to be implemented within the certified service territory of another utility."

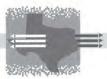
Another proposal holds that generating utilities should bear the responsibilities of developing IRP plans, since generation of power is the focus of IRP. Non-generating utilities could take part in the generating utilities' plans, but should be allowed to retain flexibility to take advantage of the emerging competition in the wholesale power market.

Utilities also propose that only those generating utilities with generating capacity of 100 MW or more be required to participate in IRP, and that participation in the development of a plan be limited to the generating utility's consumers, because "the cooperative's own member-consumers are in the best position to participate in development of the plan."

When no new generation is planned, river authorities and generating cooperatives believe no hearing on preliminary IRP plans should be required for them.

In general, a variety of utilities describe circumstances where an exemption from DSM requirements may be appropriate. The PUC should have the authority to grant exemptions.

Recommendation 20: DSM for Renters and Low Income Consumers - Direct the PUC to encourage the development in IRP of cost-effective DSM which appropriately addresses the needs of renters and low-income consumers.



Under this proposal, demand side management (DSM) programs would be designed specifically to meet the needs of renters and low income consumers. Rental units are of concern both because they tend to house lower income families and because renters have little incentive to improve their landlord's property through efficiency upgrades. Similarly, landlords have no incentive to make units more energy efficient without raising rents to cover their investments. Many businesses are also renters and large energy consumers. These businesses will face similar rate increases without concomitant energy conservation programs unless DSM is specifically addressed for them in IRP.

Recommendation 21: Moving Generating Plants Out of Rate Base - Direct the PUC to ensure that existing plants are not moved from rate base to the detriment of ratepayers.

Some parties expressed concern over the possibility of existing plants being moved from rate base to the detriment of ratepayers. As a solution, an amendment is offered which includes this language: The Commission may, after notice and hearing, allow such facility to be sold, transferred to an affiliate or become an eligible facility only if such sale or transfer will 1) benefit ratepayers of the utility making the sale or transfer; 2) is in the public interest; and 3) otherwise complies with provisions of state law.

Recommendation 22: Cost Comparisons - Require utilities, prior to making substantial changes to existing plants, to report to the PUC costs of proposed changes in comparison to costs of available alternatives.

Concern was expressed over the cost of operating existing plants, and any refurbishing thereof, in comparison to replacing those plants. Proposals made to address these concerns include the following: If an existing plant is not performing at or near capacity for an extended period of time, and the anticipated costs of repair, upgrades, regulatory required retrofits, or continued operations and maintenance exceed the costs of alternatives, the Commission shall examine whether it might make more sense to shut down the poorly performing plant and replace it with another supply side resource or a demand side management program with a lower overall cost. In such instances the Commission shall convene a hearing on whether to revoke the CCN. The Commission could also revoke the CCN for an existing plant which is not performing at or near capacity.

Recommendation 23: Intervenors' Recovery of IRP Intervention Expenses - Rely on the Public Counsel and the PUC to represent the public's interest in IRP, rather than create additional representation to be paid by ratepayers.

This proposal includes the following amendment for Intervenor Cost Recovery for participation in IRP: ".. standards for payment by the utilities of the reasonable cost of the public participants for participation in the

process. These costs include: the costs of travel, lodging and per diem and the cost of such counsel and experts as the public participants may determine necessary for an analysis of the utilities proposals and development of alternatives. The Commission shall be authorized to group the parties, and may authorize payment during the planning process and at various stages of the proceeding. The Commission shall limit payment to those parties who have or are expected to materially assist the Commission in its deliberations, and only for development of such issues as are not being developed by the Office of Public Counsel or the General Counsel.

Recommendation 24: Competitive Pricing Fears -Authorize the PUC to respond to complaints involving predatory pricing.

Smaller utilities express concern over the issue of "competitive pricing," "banded pricing", and other versions of pricing flexibility. The concern is that such pricing schemes may lead to anti-competitive predatory pricing.

Recommendation 25: Solicitations Outside the IRP Process - Include specific provisions in the IRP legislation to allow appropriate solicitations outside the IRP process.

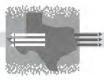
In light of the rapidly-changing environment in which electric utilities are operating today, they should be allowed the flexibility to take action outside the solicitation process to obtain benefits for their ratepayers that may suddenly become available. Such actions must be limited however, to those which do not include affiliated resources, in order to prevent self-dealing problems. And they must be consistent with the goals and objectives of the utility's most-recent IRP.

IPPs offer the following specific proposal in this regard:

Consistent with the objectives of its last-approved integrated resource plan, a utility may add new or incremental resources outside the solicitation process only as follows:

- contract extensions for existing capacity from nonaffiliated power generating facilities;
- (2) non-affiliated demand-side management or renewable resources;
- (3) capacity purchases with terms of two years or less from non-affiliated power suppliers or capacity purchases necessary to satisfy unanticipated emergency conditions;
- (4) the exercise of an option in a purchase power contract with an unaffiliated supplier; or
- (5) distributed resources if they are less costly than transmission extensions or upgrades.

Recommendation 26: Certification and Cost Recovery for Purchased Power And DSM Costs - Ensure that any requirements involving contract certification and cost recovery for purchased power or DSM costs include



reasonable review by the PUC, with ample opportunity for interested parties to participate in the process.

The proposal involving purchased power includes the following:

If a utility and a purchase power provider enter into an agreement providing for the purchase of capacity, certification may be requested by the utility as part of an integrated resource plan filing, or may be requested in a separate proceeding brought solely for that purpose. If certification is requested in a separate proceeding the Commission shall make its determination under this Subsection within 90 days after the date that the agreement is submitted.

The Commission shall certificate the agreement if the agreement is consistent with that utility's most recently approved integrated resource plan or, for an agreement considered contemporaneous with an integrated resource plan, is consistent with the plan approved therein by the Commission; and, for agreements where the purchased power is to be provided by the purchased power provider from a specific generating plant or plants, the agreement provides the utility the opportunity to acquire the generating facilities before those facilities are offered to another purchaser in the event of their abandonment, or provides other sufficient assurance that the utility will be provided with a comparable supply of electricity, if the purchased power provider ceases to operate the generating facilities.

If the Commission fails to make a decision by the specified deadline, the agreement is deemed to meet the requirements and certification is deemed granted. Certification under this Subsection shall be effective until the earlier of 35 years after the date of the certification or the expiration date of the agreement.

In setting the utility's rates for a period during which the certification is effective, the regulatory authority shall consider payments made under the agreement, and any markup requested by the utility pursuant to Subsection (t) of this section, to be reasonable and necessary operating expenses of the utility. The regulatory authority shall allow full, concurrent, and monthly recovery of the amount of such payments and markup.

The proposal involving demand-side management services is similar, and includes the following:

If a utility and a demand-side management services provider enter into an agreement providing for the provision of demand-side management services, certification may be requested by the utility as part of an integrated resource plan filing, or may be requested in a separate proceeding brought solely for that purpose. If certification is requested in a separate proceeding, the Commission shall make its determination within 90 days after the date that the agreement is submitted.

The Commission shall certificate the agreement if the

agreement is consistent with that utility's most recently approved integrated resource plan or, for an agreement considered contemporaneous with an integrated resource plan filing, is consistent with the plan approved therein by the Commission.

If the Commission fails to make a decision by the deadline, the agreement is deemed to meet the specified requirements and certification is deemed granted.

Certification under this Subsection shall be effective until the earlier of 10 years after the date of the certification or the expiration date of the agreement.

In setting the utility's rates for a period during which the certification is effective, the regulatory authority shall consider payments made under the agreement, and any markup requested by the utility pursuant to Subsection (t) of this section, to be reasonable and necessary operating expenses of the utility. The regulatory authority shall allow full, concurrent, and monthly recovery of the amount of such payments and markup.

Note: The above two proposals generated substantial opposition from other parties.

Recommendation 27: CCN Exemption for R&D (research & development) and Small Generating Plants - Authorize the PUC to establish appropriate proceedings for such facilities, with the requirement that affected ratepayers and other affected parties have ample opportunity to participate in the proceedings.

Utilities propose that no certificate be required for a proposed "rate base" generating unit that is a distributed resource with a planned capacity of less than 10 megawatts or a facility to be installed for purposes of research and development, regardless of whether the unit is connected to the utility's grid. The proposal would allow such a unit to be built any time after the Commission is advised in writing by the utility of its intent to build the unit.

Recommendation 28: Mergers and Acquisitions -Ensure that mergers and acquisitions are consistent with the public interest by delegating appropriate authority to the PUC.

This proposal concerns the effect of mergers and acquisitions on ratepayers, employees and shareholders of investor owned utilities. The standards for review of a merger are said to be vague and by and large meaningless under Section 63 as it is currently written. It is important for the Commission to be required to review a proposed merger prior to consummation at least with respect to the impact on the employees, both management and non-management, and with regard to the effect of the merger on the quality of service to ratepayers. As a starting point additions proposed to Sec. 63 of PURA include:

No public utility, person or corporation required by



this section to report a transaction to the Commission, whether or not organized under the laws of this state, shall acquire or control either directly or indirectly any public utility organized and doing business in this state without first securing authorization to do so from the Commission. On the filing of a report with the Commission, the Commission shall hold a public hearing. The Commission may not approve and authorize the transaction, merger or consolidation unless it finds that it is consistent with the public interest.

Recommendation 29: Timely Fuel Cost Recovery - Require the PUC to develop rules to allow timely fuel recovery. Adopt SB 498 language, Sec. 43 (g), as agreed to by working group members: Allow the PUC to streamline the process, including a "with or without hearing" option.

An electric utility's rates are set by the PUC after extensive review of the utility's expenses and investment during rate case hearings. The cost of fuel used to generate electricity can vary greatly between rate cases; adjustments for recovery of those fuel costs are therefore allowed outside of the periodic rate cases, as adjustments to the utility's "fuel factor". The procedure for adjusting fuel factors includes hearings, and is in accord with the PURA requirement that a utility may not automatically adjust and pass through to its ratepayers the changes it encounters in fuel costs. This recommendation would: Require the Commission to provide for the timely "up front" adjustments of a utility's fuel factor, but with an "after the fact" prudence review by the PUC; Allow affected parties to request a hearing, although the PUC would not have to grant the hearing; and maintain the requirement of a hearing for the utility's fuel transactions with an affiliated interest.

Recommendation 30: Electric Cooperatives. Partially deregulate electric distribution cooperatives, with consumer safeguards maintained - as agreed to by the working group members.

Proposed legislation would allow for deregulation of rates charged by electric cooperatives upon a vote of the cooperative's consumer-members; and

Provide for the following safeguards against potential abuses by deregulated electric cooperatives:

An appeal mechanism where 10 percent of all consumer-members could petition the PUC and force a PUC rate review;

An appeal mechanism where one or more consumers purchasing at least 50 percent of the annual energy sales to any customer class could petition the PUC and force a rate review;

An appeal mechanism where an executive officer of an affected electric utility could petition the PUC to have rates reviewed;

Allow the PUC to review a change if it finds good

cause to believe the cooperative is earning more than a reasonable return on overall system revenues or on revenue from a rate class;

A requirement that prior to changing a rate an electric cooperative must have a cost of service study that is not more than five years old and is available for review by interested parties; and

A requirement that cooperatives continue to satisfy all reporting requirements pursuant to PURA and rules adopted by the Commission.

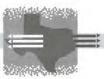
Cooperatives are non-profit companies and are owned by the customers of the co-op. Most of their rate cases are not contested and requested rate increases are usually granted by the PUC with little or no changes. This suggests that less regulatory protection is needed for the companies' customers against monopoly abuse, in comparison to investor owned utilities. Also, costs associated with rate cases can be unduly expensive on a per-customer basis for smaller co-ops. A majority of other states have adopted similar proposals with little or no impact on rates.

Even though the cooperatives are owned by the customers, the individual residential customer has limited ability to contest rate increases or other actions taken by the co-op which may not be in the best interests of residential customers. An example might be rate design, where larger, commercial customers may be able to exercise undue influence. Therefore, appropriate safeguards for all co-op customers are necessary.

Recommendation 31: Exempt Wholesale Generators - Authorize EWGs and power marketers to operate in Texas, with appropriate limitations and safeguards included in the legislation.

Should "exempt wholesale generators" be made exempt from most regulatory provisions of PURA, by rule or by statute, provided certain safeguards are met?

Exempt Wholesale Generators are independent power producers, exempted from the Public Utility Holding Company Act in 1992. EWGs are allowed to sell power at market based prices in 47 other states. Texas law requires EWGs to be regulated like traditional utilities. EWGs are not built to produce steam; they are built to produce power. They are therefore different from co-gens. In addition, utilities are not compelled to purchase power from EWGs as they are from co-gens. EWGs would compete with the utilities' generating plants (existing or proposed), to provide the utilities' power requirements. The utilities consider unregulated EWGs to have unfair competitive advantages over their own regulated generating plants. EWGs argue there is no economic justification for regulating them like traditional utilities since they are competitive businesses, producing and selling wholesale power to utilities rather than selling at retail to captive customers. EWGs do compete with the utilities' generating plants to produce the power; they do not now compete with the utility for retail sales.



Recommendation 32: Retail Wheeling - Authorize the PUC to allow limited forms of self-service retail wheeling within a limited distance as a pilot program. Put a hold on all other forms of retail wheeling pending results of the pilot program.

Should Retail Wheeling Be Prohibited? Should the PUC be authorized to require a utility to provide transmission service to another utility or entity for the purpose of transmitting wholesale power, but not for the purpose of transmitting retail power to end users?

Wholesale Wheeling involves the use of a utility's transmission lines to transport power not generated by that utility (e.g., generated by an independent power producer) to a wholesale customer of that power producer. Examples of wholesale customers are municipally owned power companies & electric cooperatives. The proposed legislation would prohibit retail wheeling. That is, a utility's transmission lines could not be used to transport power generated by another producer to a retail customer, such as a manufacturing plant.

A variation of Retail Wheeling is Self-service Wheeling or Affiliated Company Wheeling. An example is a co-gen which produces power for its own industrial purposes at the site of the generator, but has another industrial site which is remote from its generator. The company would like to transmit its excess power to its other installation, instead of selling it to the utility. The only practical way to do that is to bargain with the utility for transmission service. The utility would naturally prefer not to lose the remote industrial site as a customer. Revenue generated by providing the transmission service would not ordinarily offset the revenue the utility would lose by no longer selling electricity to the industrial customer.

Major questions raised by the retail wheeling issue include: 1. The impact on the utility of reduced load and lost revenue caused by losing customers, and therefore the impact on the utility's other customers. (Does the reduced load forestall the building of new plants and therefore forestall rate increases? Will other customers' rates be increased to make up for the utility's lost revenue?) 2. What is a fair price for the retail wheeling service? The impact or burden of wheeling on a utility's transmission grid has been the subject of much debate; conclusions as to a fair price have varied widely.

NOTE: Although FERC has recently exerted its preemptive jurisdiction over Wholesale Wheeling in Texas (in the TEX-LA v. Texas Utilities dispute), the Energy Policy Act of 1992 apparently leaves jurisdiction over Retail Wheeling to the states. More recently, in a filing with FERC concerning the acquisition of El Paso Electric Co. and the availability of transmission services, FERC said in its Order that it would entertain requests for an order requiring transmission services involving ERCOT facilities under Sec. 211 of the Federal Power Act.

Recommendation 33: Purchased Power in Non-contiguous areas. Allow the PUC to resolve such complaints.

The proposal would authorize the PUC to establish a mechanism to allow certain electric utilities (i.e. TNP) to recover purchased power costs in a manner that reflects the separate costs for specific noncontiguous areas.

When a utility's rates are set, they are based upon the utility's system-wide investment and expenses. No attempt is made to assign specific generating plant costs to specific customers. The issue raised here involves a utility which serves non-contiguous areas of the state with non-interconnected generating plants and purchased power serving each area. The cost of power distributed to customers in one area is less than the cost of power distributed in other areas.

Proponents of this position—those who receive the power which cost less—believe their rates should reflect that lower cost, rather than reflect the utility's combined system-wide power costs. Here, the utility's revenue requirement has been established and system-wide rates were set based upon system-wide costs. If rates are lowered for customers in one area, they would presumably be increased for customers in other areas in order to meet the utility's revenue requirement.

Recommendation 34: Targeted Return on Equity - Revision of the rate-setting process for electric utilities - Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties.

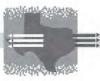
The proposal is offered as an alternative method of setting rates, involving a targeted return on equity. It represents a major departure from traditional rate-setting procedures, and apparently has not been tried in other states. The proposal was not presented in time for analysis and discussion by the working groups; it has encountered a considerable degree of opposition and uncertainty.

Recommendation 35: Assignment of financial liability for stranded investment - Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties.

Stranded investment is a potential result of transitioning from a monopoly system for electric utilities to a competitive environment. The reality or extent of such stranded investment is an unknown, and any assignment of specific liability, as between ratepayers, shareholders, and transmission customers of the utility, should be based upon an adequate study of the facts.

Recommendation 36: Transfer of assets - Retain PURA safeguards which ensure that utility assets are not transferred to the detriment of ratepayers.

The proposed change would require PUC review only upon the transfer or sale of "all or substantially all" of the utility's assets, as opposed to the current review required for the sale or transfer of assets of \$100,000 or more. Safeguards should be retained to ensure that no such transfer results in any net rate increase to ratepayers.



Recommendation 37: Restrictions on co-generation - Do not enact legislation which would be incompatible with federal laws encouraging co-generation; defer consideration of co-generation limitations until the proposals are carefully reviewed and fully discussed by interested parties.

Cogenerators express concern that these new proposals would prevent or unduly restrict new co-generation, would make some existing co-generators' activities illegal, and, in some cases, amount to a confiscation of property. The proposals are new ones and have not received sufficient study by affected parties.

Recommendation 38: Deregulation of wholesale power rates - Ensure that wholesale power rates are appropriately regulated; establish a regulatory path which will achieve less regulation commensurate with the development of effective competition.

Under existing laws, the PUC has jurisdiction over the generation, transmission and distribution of power. Some opening up of power generation to independent power producers is being considered. Along with that is the likelihood that utilities would create affiliates to generate power. Any deregulation of wholesale power should not only receive careful review, that review should include the impact of deregulation upon affiliate transactions and the related safeguards.

In addition, some parties contend that continued regulation will be appropriate until effective competition exists.

Recommendation 39: PUC jurisdiction - Do not extend PUC jurisdiction to books and records of non-utility competitors. Instead, consider measures to limit public disclosure of sensitive information affecting competing power producers subject to PUC jurisdiction as utility affiliates.

Utilities expect to have affiliate exempt wholesale power generators, in competition with independent power producers. Under existing laws, the independent power producers would not be subject to PUC jurisdiction involving examination of their books and records. The affiliated power producers' books and records would be subject to examination. This proposal, to "level the playing field", would subject the independent power producers to the same level of PUC jurisdiction. This proposal runs counter to the frequently expressed preference that government regulation be expanded only when it is necessary and clearly in the public interest.

Recommendation 40: Proposal to impose limitations on Sec. 42 proceedings - Ensure that essential ratepayer protections provided under Sec. 42 are not diminished.

Under current PURA Sec. 42 provisions, the PUC is authorized to adjust existing rates of a utility upon its own motion or in response to a complaint by a ratepayer, if the rates are found to be unreasonable. In order to adjust the rates, the PUC must comply with traditional rate-setting procedures. The utilities propose to significantly change the Sec. 42 procedures, including a new requirement that ratemaking principles adopted in that utility's last rate case be followed in the current proceeding, and that an alternative method of setting rates (a targeted return on equity) be authorized.

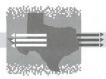
Recommendation 41: Requiring the PUC to include intangible assets in a utility's rate base -Rather than statutorily require the PUC to include intangible assets, continue to allow the PUC to balance the interests of ratepayers and shareholders in determining whether assets are "used and useful".

In setting a utility's rates, the PUC determines which assets are properly included in the rate base, and determines the appropriate rate of return to be applied to the rate base. At any given rate of return, an increase in the rate base translates into higher rates to consumers, and more revenue to the utility. The requirement to add "intangible" assets to the rate base is a concept which was not addressed during the working group sessions. A number of parties strongly oppose the idea on the basis that it would overrule longstanding precedent, and that it would allow utilities to increase rates by "flipping" properties back and forth among themselves.

The impact of the proposal on ratepayers is, at best, uncertain. Close scrutiny and debate would help to define the impact on all interested parties, and should be completed before being incorporated in legislation.

Recommendation 42: Changes in city jurisdiction over utilities - Defer consideration until the proposal is carefully reviewed and fully discussed by interested parties - especially the cities.

One proposal was made which would revise the jurisdiction of cities over electric utilities is a unilateral one by the utilities. It has not been subjected to the scrutiny and debate of the working groups. Until cities, individually or represented by the Texas Municipal League, have full opportunity to respond to the proposal, it should not be included in legislation.



CHAPTER THREE

RECOMMENDATIONS

The following eleven recommendations regarding the telephone industry are discussed in the next section of the report.

Adoption by the committees of any recommendation in this report does not mean any related proposal is adopted. The recommendations are intended to stand alone; they are complete within themselves.

Recommendation 1: Encourage investment in the state's telecommunications infrastructure in order to provide Texans access to advanced services which will promote economic development, provide new tools for our education system, and make health care more accessible and affordable.

Recommendation 2: Institute an optional `incentive regulation' program to replace traditional rate of return regulation for electing companies with a category of service system in which prices are regulated based on the type of service provided and the degree of competition available for that service.

Recommendation 3: Introduce competition at the local level by creating a new certification classification that allows companies other than the traditional local exchange company to provide switched local exchange service.

Recommendation 4: Implement policies that facilitate the ability of new companies to enter the telecommunications market by removing certain barriers to entry.

Recommendation 5: Direct the Commission to com-

plete its costing and pricing procedures to ensure that rates for telecommunications services are fair and reasonable for Texans.

Recommendation 6: Implement policies to ensure nondiscriminatory treatment of all telecommunications carriers in a multi-provider environment.

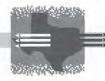
Recommendation 7: Develop polices that protect the privacy of Texans by prohibiting the use of customer proprietary network information for commercial purposes, other than to provide telephone and enhanced services.

Recommendation 8: Provide safeguards so that local exchange companies getting into new business ventures such as audio and video programming, information services and electronic publishing compete on a level playing field with other competitors in the market.

Recommendation 9: Establish a flexible regulatory policy for small telephone companies and cooperatives with fewer than 31,000 access lines and provide for the partial deregulation of telephone cooperatives.

Recommendation 10: Create a rural scholarship fund for students in rural Texas.

Recommendation 11: Protect consumers from unreasonable long distance charges at private pay telephones and prohibit these providers from charging for certain calls. Require private pay phone providers to register with the Public Utility Commission. ■



CHAPTER THREE

TELECOMMUNICATIONS UTILITY ISSUES

CREATING A REGULATORY ENVIRONMENT WHICH WILL RECOGNIZE AND MANAGE THE TRANSITION TO A COMPETITIVE TELECOMMUNICATIONS MARKETPLACE IN TEXAS

Until the mid-1970s the state of Texas provided little guidance or oversight of the telecommunications industry and privately owned utilities went unregulated by the state. In 1975 the Texas Legislature passed the Public Utility Regulatory Act (PURA) and created the Public Utility Commission of Texas (PUC), making it the last state to enact such a law. The current regulatory system has its origins in the era when 'telecommunications' meant 'plain old telephone service' and one telephone company provided and met all of a community's telecommunications needs. Today's telecommunications market is completely different than the market of the mid-1970s. Technological advances and emerging competition have begun to challenge the concept of local telephone monopolies. The ability of Texas to meet its telecommunication policy goals and ensure development of an advanced infrastructure through traditional regulatory and administrative means is being outpaced as industry and technology changes.

Telecommunications are already pervasive. Telephones link us to loved ones near and far. We summon help with telecommunications in emergencies. Television offers a view as distant as the world and as near as our neighborhood. Telecommunications, in all forms, links businesses to customers, suppliers, investors and regulators. Our first point of contact with our government is often through telephone or television. We have all come to depend on reliable and ubiquitous electronic communication.

Until the last two decades, progress in telecommunications technology was directed toward improving the quality and capacity of existing services. Now, new technologies offer far more. Advanced telecommunications services have proven to be valuable through specific applications in a variety of fields. Some 911 emergency telephone systems not only route calls to the proper branch of service, but can identify the address of the caller and thus hasten response. Some clinics are linked to larger hospitals with live video, so that patients can "see" specialists without travel. Some large hospitals are linked to medical schools so doctors can consult researchers.

The major universities in Texas are linked by several high-speed computer networks. Originally constructed

here so that researchers could share expensive supercomputers, the networks are now used by students and staff to share information of all sorts. Many public schools and community colleges have access to educational TV via cable systems, and some have links to universities and the world via the Internet. Students and researchers not only gain access to distant libraries, but collaborate on projects that span the world.

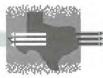
The same network is also a venue for new forms of play and fellowship, forms which evolved into the features needed to conduct commerce on the network. Businesses advertise, take orders for merchandise, and even accept payment over the network. Companies are increasingly using the Internet to post product specifications and safety information in copious detail.

Large manufacturers and retailers use custom networks to coordinate suppliers' shipments and reduce delivery times and warehousing expense. Defense and automotive manufacturers send detailed images and computer-aided design data to their suppliers of subcomponents and to customers, and the apparel industry is beginning to follow suit.

These advanced applications are not just plans. They are real and functioning today. They have come about because they are effective. In a few states, they are widely available if not commonplace, but in Texas they exist only in limited areas where there is an advanced infrastructure to support the bandwidth they require. Schools are linked in districts that can afford it. Businesses that are already here have built private networks.

Nevertheless, there are still huge areas of Texas encompassing large numbers of people where it is not profitable to build an advanced infrastructure with the ubiquitous reach of the phone system. As the cost of new technologies falls, advanced services will spread, but the people and businesses of Texas are concerned that it will happen somewhere else first. One of the chief obstacles to the expansion of advanced services is the current regulatory system.

The historical rationale for regulation is based on curbing the power of a monopoly in the public interest. Early in this century, the government allowed AT&T to continue—in fact, encouraged it to expand—as a monopoly as long as it provided a seamless national network, served all potential customers and kept rates low. Congress, finding these goals very much in the public interest for reasons of national security and eco-



nomic progress, created the Federal Communications Commission (FCC) and gave it broad authority to oversee the industry.

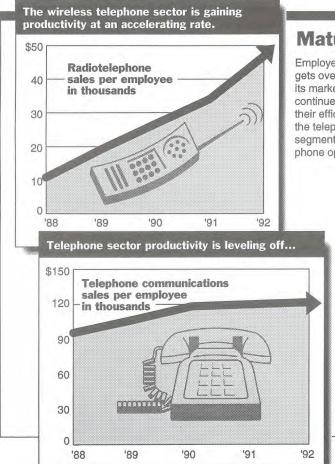
The states regulate local and intrastate long-distance services under a similar rationale. The Texas Legislature enacted PURA in 1975 to "protect the public interest inherent in the rates and services of public utilities." The law provides for regulation of utility rates, operation and services as a substitute for the normal competitive forces that regulate prices in free enterprise. PURA created the Public Utility Commission (PUC) to ensure that local exchange monopolies offer basic phone service to everyone at low rates.

Advances in technology are making new services available for both business and residential consumers. These advances have also resulted in increased possibilities for alternative providers to compete with the local exchange companies in the telecommunications market. Unfortunately, the current regulatory structure has become an obstacle to the local exchange companies' and new entrants' ability to introduce these new and innovative services.

By 1987, the emerging changes in telecommunications prompted the Texas Legislature to adopt amend-

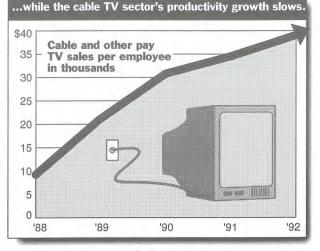
ments to PURA intended to recognize the emergence and growth of competition in the local and long distance telecommunications markets. The 1987 amendments were intended to give Southwestern Bell and the other local exchange companies the opportunity to show the Commission that competition existed for some services and receive flexibility for those services.

In 1993, the Legislature reviewed the Public Utility Commission and along with its recommendations to continue the agency, the PUC Sunset Bill contained provisions which would have granted incentives to certain local exchange companies to make investments into Texas' telecommunications infrastructure. These companies would have frozen rates on services such as local residential and business service, PBX trunk lines, intralata long distance and switched access service for two years. The infrastructure incentives emphasized investments to benefit public education. The bill contained measures to streamline the regulation of small local exchange companies and cooperatives along with direction to the Commission to open up the telecommunications market to other players by removing some restrictions from existing local exchange company tariffs for PBX type services. The legislation also called for the creation of an interim committee to study and make recommendations on the need for comprehensive changes



Maturing and emerging markets

Employee productivity tends to increase as a new industry like wireless gets over the startup hump, realizes economies of scale and penetrates its market. In the more mature telephone and cable TV markets, limits to continued expansion have already forced most companies to improve their efficiency. These figures may understate the case, not only because the telephone category includes long-distance companies (a growing segment) but also because local phone companies own some cellular phone operations.



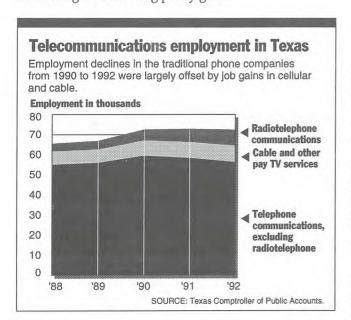
SOURCE: John Sharp, Texas Comptroller of Public Accounts



to telecommunications regulation and consider the need for new state regulatory policy. Although the PUC Sunset Bill did not pass, this committee was formed to carry out that goal.

The Joint Interim Committees on Telecommunications provided opportunities for state, industry and consumer leaders to discuss the broad telecommunications issues and the affect on Texas' economic development, competitive future, and ability to ensure adequate phone service at a reasonable price. In the past year, the committee made efforts to develop solutions to the telecommunications regulatory issues facing Texas. The committee's major finding is that most of the contributing parties agree that the status quo is no longer adequate and regulatory change is imperative to keep Texas in pace with other states and nations.

The Public Utility Commission has taken significant action in the recent past to lessen the regulatory burden and help ensure that the benefits of an advanced telecommunications infrastructure are more readily available to the citizens of Texas. However, in light of the drastic changes that are taking place in the market-place and the advances in technology, the Joint Interim Committees on Telecommunications has found that it is time to reform our regulatory policies and statutes to create an environment to promote efficiency, investment, and competition in the telecommunications industry. This new regulatory structure should recognize the dramatic changes in telecommunications and encourage investment in Texas' infrastructure by addressing the following policy goals:



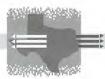
 Create a regulatory structure that recognizes the changes taking place in the telecommunications industry and promotes the development of effective competition as a means of providing customers with the widest possible choice of services in a manner that is fair to all participants.

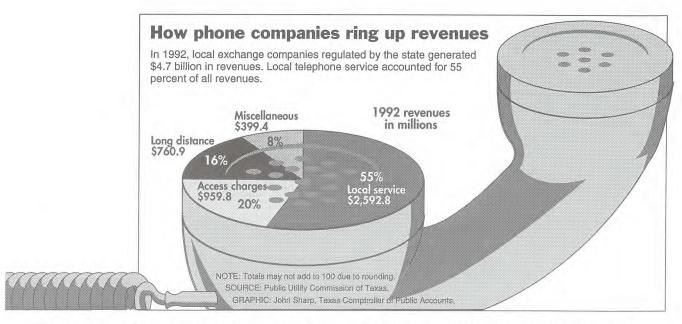
- Provide the Public Utility Commission with the ability to manage the transition to a fully competitive marketplace by adjusting regulation to match the degree of competition in the marketplace thereby reducing the burden and cost of regulation.
- Promote network diversity and interconnectivity throughout the state to facilitate the efficient development of an advanced seamless telecommunications infrastructure.
- Encourage competition as an opportunity to bring about consumer choice, jobs and an improved economy; encourage facilities-based competition where appropriate, as well as the use of existing facilities and the cooperative development of new facilities to meet state policy goals.
- Recognize that the strength of competitive forces varies widely among markets, products, and services and ensure that the regulatory environment recognizes the differences between companies providing service in certain areas of the state.
- Protect and maintain the wide availability of highquality telecommunications services at an affordable rate to all citizens of the state in a competitively neutral manner.
- Ensure that providers of telecommunications services in the state provide high quality customer service and high quality technical service.

The Joint Interim Committees was presented testimony particularly concerned with providing Texas residents continued access to universally available, affordable basic local telecommunications service. This testimony assisted in the formation of a generally accepted goal of encouraging investment in an advanced infrastructure which will benefit the state's public institutions such as institutions of public education, libraries and non-profit public medical institutions and drive economic development throughout Texas.

Recommendation 1: Encourage investment in the state's telecommunications infrastructure in order to provide Texans access to advanced services which will promote economic development, provide new tools for our education system, and make health care more accessible and affordable.

To ensure that the benefits of a modern telecommunications infrastructure are available throughout the state, the Joint Interim Committees has developed recommendations consisting of three primary components: an incentive regulation plan for local exchange companies, which will encourage those companies to invest a significant portion of their profits back into Texas; advancement of policies that will open the telecommunications market to more competition; and the continuation of policies to ensure that all citizens of the state have access to affordable, high quality service.





In light of the regulatory flexibility discussed in this report, local exchange companies will have a greater incentive to invest in infrastructure improvements which will spur economic and job growth, and improve the quality of life within the state. The promotion of this high-speed telecommunications network is designed to enhance education and health care in Texas.

By encouraging infrastructure investment into the construction of this network, distance learning and telemedicine services will be available to customers much sooner than they otherwise would be. Distance learning will allow schools in rural and urban areas of the state to link up with each other in one classroom and interact with students and teachers, bringing incredible benefits to our education system. However, a state of the art network is comprised of more than just fiber optic lines and digital switching devices. Public testimony indicated that 97 percent of our classrooms do not have access to a phone. In addition to the lack of phone lines, teachers still need access to modems, network computers and classrooms with sufficient electrical wiring to support the new technologies that are becoming a part of schooling. This statement provides evidence that the investment should be broader than just telecommunications facilities. For the targeted participants, such as Texas' schools, libraries and public medical institutions, a fund to help with the purchase of equipment and provide the training that is required to utilize the network should also be encouraged.

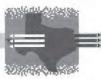
This investment will bring real benefits to the citizens of the state in the areas of education and public health. In return, the policy will spur the development of an infrastructure that would be accessible to others, thereby stimulating economic growth. In order to ensure that Texas does not fall behind in telecommunications technology, the participating local exchange companies should be required to meet targeted dates for the deployment of specified technology in an accelerated fashion.

Opening the state's telecommunications market to competition will also drive new investment throughout the state. This report contains recommendations that will allow alternative carriers, companies other than the traditional local exchange company, to provide local service in the state. The development of a competitive market, or even the prospect of the development of a competitive market, will generate investments that promise a sound return on investment and further the state's goal of promoting an advanced infrastructure.

Finally, the value of a telecommunications network is enhanced by its widespread availability to consumers in all parts of the state. Business consumers, residential consumers, and public institutions in both the rural and urban areas of the state should continue to have access to affordable, high quality service. By ensuring the benefits of a modern telecommunications infrastructure are broadly available, these policies will encourage the deployment of advanced technology which will spur growth of the economy and job market.

Recommendation 2: Institute an optional 'incentive regulation' program to replace traditional rate of return regulation for electing companies with a category of service system in which prices are regulated based on the type of service provided and the degree of competition available for that service.

In order for Texas to compete economically with the rest of the nation, the Texas Legislature must reform the policies which govern telecommunications. This committee recommends the adoption of an incentive form of regulation which will allow companies to move out from under traditional rate of return regulation and operate within a system that combines streamlined regulatory oversight with new forms of flexibility, balanced with the implementation of consumer and competitive safeguards designed to facilitate competitive entry in the local exchange market.



Companies under rate of return regulation state that the system is out-dated and has not kept up with the dramatic events taking place in today's market. The rate of return environment discourages the efficiency of investment and does not encourage true competition. This plan will recognize the status of the current telecommunications market and provide the Commission with the necessary tools to react as the telecommunications market changes. Companies not wishing to elect into this optional plan would continue to be regulated under the current system in which the Commission sets the price that may be charged for certain services based on the company's rate of return on investment.

The proposed system contains three categories of service with different regulatory treatment for each category. The first category includes basic residential and business services that can only be obtained from the local phone company. The price for these services could not be raised by the company for a time period to be set in the statute.

The second category would contain services that are discretionary and currently provided only by local exchange companies. Examples of discretionary services, or non-essential services, are call waiting, call forwarding and Caller I.D. The prices for these services would be subject to a higher degree of flexibility than the services in the first category. Companies would be permitted to change the price of these services within a floor of their long run incremental cost and a ceiling set by the Commission.

The third category contains competitive services. Prices for these services would receive the greatest degree of flexibility, but the Commission would retain the authority to set a floor at the long run incremental cost of the service to ensure that the prices are not predatory. All telecommunications services would still have to meet quality of service standards.

This form of incentive regulation would be used as a substitute for rate of return regulation. It is designed to promote investment in Texas' telecommunications infrastructure, allow local exchange companies to respond to competitive forces, and is similar to incentive regulation programs that have been enacted in several other states

The price and quality of services would continue to be overseen by the Commission. Proponents of this incentive regulation plan have assured the Legislature that this form of regulation would promote investment in Texas and efficiency in the companies that do business here.

The degree of flexibility given to the local exchange company should be balanced with the degree of competition it faces. PURA should be amended to conform regulatory policy to the degree of competition that exists in the market. Local phone companies should be able to respond to competition while the Commission

should have the ability to quickly adjust its regulatory treatment to reflect the market. However, the Commission should be able to ensure that the phone company does not act in a manner contrary to the public interest until competition can effectively take over that role. The Commission should also be able to ensure that neither the local exchange company nor a new competitor is burdened with unnecessary regulation that inhibits its ability to compete.

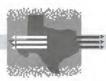
Recommendation 3: Introduce competition at the local level by creating a new certification classification that allows companies other than the traditional local exchange company to provide switched local exchange service.

Historically, local exchange service has been offered by a monopoly company. This policy has been successful in building a mature telecommunications system that passes almost every home and business in Texas. Technology has made it possible for new players to enter the market. However, a new certification process is necessary to lower the legal barriers faced by potential competitors who want to enter Texas' telecommunications market. Companies desiring to provide local exchange service should be given the opportunity to apply at the Commission for a certificate of operating authority (COA) in lieu of a certificate of convenience and necessity (CCN). Currently, in order to enter the

Capabilities of Switching Technology

Functions	Electric Mechanical	Electronic Analog	Digital
"POTS"		1	1
Touch Tone	1	1	1
Low Speed Modem (2400 bps or below)	.?	1	1
High Speed Modem (above 2400 bps)	X	1	1
Custom Calling Features	X	1	1
Switched Data	X	X	V
ISDN	Χ	X	1

- switch generally cannot provide



local exchange market in Texas a CCN is required. PURA contains certain provisions that make it extremely difficult for an alternative provider to be certified to compete for local exchange service. In Texas, 60 local exchange companies have CCNs to provide local service. These carriers are the only local service providers in a designated area and do not compete with each other for customers.

Potential competitors identified the ability of new entrants to obtain a new type of entry certificate as one of the fundamental requirements to bring competition to Texas' local telecommunications market. The Legislature must balance the competing economic interests of the existing local exchange company and the new entrant. All companies want to avoid costly and burdensome regulation. The existing local exchange companies want their regulatory burden reevaluated in light of the changing environment. New entrants advocate different levels of regulation for companies coming into the market and companies that are already established. Just as important is the need to continue to ensure that the benefits of competition are realized by consumers, and that until that time, protection for ratepayers who have no competitive choice is provided.

To do this the Legislature must ensure that the obligations of a new entrant do not preclude it from entering the market. The incumbent local exchange company should be provided with sufficient flexibility to compete with the new entrant, and ensure that appropriate regulatory oversight is maintained for services and areas where competition does not exist.

Historically, Texas, as well as the rest of the nation, has held a policy that the local monopoly must provide service to anyone who requested it. Today, over 91 percent of all Texas households have telephone service. The new certification policies designed by the Legislature should consider the obligation to serve and carrier of last resort requirements in light of a multi-provider environment, in order to ensure that the achievements of earlier telecommunications policies are not lost.

Recommendation 4: Implement policies that facilitate the ability of new companies to enter the telecommunications market by removing certain barriers to entry.

The Commission should be directed to implement a number of consumer and competitor safeguards designed to open the local exchange network, create balanced regulatory treatment, and provide protection for consumers as the need for regulation is being replaced with a competitive environment. The Commission should be given a directive to promptly implement the policies and safeguards developed by the Legislature to allow the transition to a competitive market. The following issues were identified as those most important in ensuring the development of a marketplace in which consumers have a choice of providers.

• Interconnection. The Legislature should require the

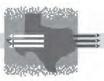
Comparison of Technologies

Technology	Network Required	Services Supported
Voice Grade (300 to 3000 Hz.)	Twisted Pair Copper or Wireless Radio	'POTS' Modern Connection Facsimile Low Quality Video
Narrowband (up to 1.544 Mbps)	Twisted Pair Copper Coaxial Cable or Microwave	"POTS" Direct Digital (ISDN) Switched 56 Kbps Compressed Video (VCR Quality)
Broadband (Greater than 1.544 Mbps)	Twisted Pair Copper (up to 6 Mbps for a limited distance) Fiber or Coax or Satellite (for 45 Mbps and above)	"POTS" Direct Digital (ISDN) Very High Speed Data Broadcast Quality Video (Multiple Channels) HDTV High Resolution Medical Images

adoption of interconnection terms and conditions which will allow new entrants to connect to the local exchange company's network facilities. Interconnection is the connection of one telecommunications carrier's network with another. To have any value, the networks of telecommunications providers need to be interconnected in order for customers on competing networks to complete calls to each other. Today non-competing local exchange companies' networks interconnect with each other and with other networks such as long distance companies and cellular companies. This policy would expand interconnection requirements to meet the state's policy goals of encouraging the development of a competing local exchange network.

The ability of new market entrants to interconnect with the local phone company's network is a necessary precondition to the development of a competitive market. An interim interconnection rate, to provide both the local exchange company and other providers with a fair price for the service, should be set as soon as is feasibly possible.

The Commission should also develop the policies and regulations necessary to achieve and oversee an effectively competitive, interconnected network of networks. All telecommunications providers should cooperate to provide customers with seamless access to the information superhighway. The Public Utility Regulatory Act should contain policies that are responsive to developments in the local exchange market, including the reduction or elimination of unnecessary regulation.



The Commission should review its rates and policies upon completion of the costing and pricing procedures which are addressed below.

The Legislature should also require the Commission to adopt rules that are consistent with the rules and regulations of the Federal Communications Commission on expanded interconnection.

 Resale. The Legislature should allow for resale, with certain restrictions, of the local exchange companies' network in order to meet state policy goals. The ability of new entrants to purchase certain components of the local exchange company's network is another of the safeguards designed to facilitate entry into the local market and should be used to supplement the deployment of a competing local exchange network. Of course, any resale rate should represent a fair price for the service provided by the company.

When competition was introduced into the long distance industry, resale of AT&T's services was allowed. Today, although the market in Texas is dominated by four facilities-based players (AT&T, MCI, Sprint and LDDS), there are nearly 200 long distance `resellers' doing business in Texas. There are some similarities in the development of competition in the long distance market and the development of competition in the local market. If the situation allows, Texas should take these similarities into account as it develops its policies on issues such as resale.

The existing price structure of local exchange services has required the need for resale restrictions on their services. Prohibiting resale of service is part of a larger issue known as 'use' and 'user' prohibitions. Prohibiting resale of a service is an example of a 'use' restriction. An example of a 'user' restriction is the inability of a business customer to order residential service.

Until the Commission has implemented a modernized pricing structure and the true cost of service is known, caution must be exercised in the removal of the current resale restrictions. However, the Commission should review its resale rates and policies once the costing and pricing procedures have been completed and rates for services have been rebalanced to recover their true cost.

 Unbundling. The Legislature should require a local exchange company to unbundle its network to the extent ordered by the Federal Communications Commission (FCC).

Telecommunications services are provided by performing or providing a set of specific functions which may be used as building blocks for providing other services. The unbundling of services into these functions will allow customers to buy independent portions of the network rather than buy a package of services. Unbundling will also aid in determining the true cost of providing the various components of telecommunications services. In addition to requiring a local exchange

company to unbundle its network to the extent ordered by the FCC, another hearing should be held after the pricing rule is adopted to consider the competitive merits and public interest of further unbundling.

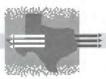
 Number Portability. The Legislature should require the Commission to adopt a rule consistent with FCC rules and regulations governing number portability and the assignment of numbers in a competitively neutral manner.

Number portability is the term used to describe the ability of customers to change their location, service providers, or service while retaining the same telephone number. Recent evidence in the 1-800 number service markets shows, even when another provider can offer services at lower prices or with additional features, customers are reluctant to change providers if it means they must also change their phone number. Business customers have an investment in their telephone numbers: the number is printed in advertisements, on stationary and business cards and may have significant meaning for the business. Residential customers, though perhaps not for the same financial reasons, enjoy the convenience of retaining the same phone number.

For these reasons the Commission should adopt a rule containing guidelines governing telecommunications number portability. Changes to the numbering plan for telephone services will require a uniform national policy. Therefore, these guidelines should be consistent with FCC rules and regulations. The Legislature should also consider an interim solution that allows customers to keep their phone numbers until this rule is adopted. The assignment of new telephone numbers should also be administered in a manner that is fair to all telecommunications providers. The Commission should be given direction to ensure the assignment of numbers in a competitively neutral manner.

• Price Imputation. The Legislature should require the Commission to adopt rules governing the conditions under which a local exchange company would be required to impute the price of its services. Imputation is a regulatory policy applied to prevent an anticompetitive pricing squeeze when a telephone company sells a service to a competitor for a higher price than it sells, or imputes, to itself. In a price squeeze, the price of an element is raised, but the price of the competitive product that uses the element is not raised. If a competitor must purchase a particular service from the local phone company in order to provide its service there should be an assurance that the phone company does not charge the competitor more than it charges the public for that service. This is important because most of the phone company's competitors are dependent on the phone company to offer their services. Since the same network is used to provide these competing services the price should be equitable among the various buyers.

The Commission should have the authority to waive



this requirement in certain instances where it may be in the public interest, such as 9-1-1 and dual party relay services. Also, in the event a local exchange company is not allowed to raise the price of a service, the Commission may not require imputation of the price of that service.

Because the strength of competitive forces will vary widely between markets, products and services, the Legislature should provide the Commission with the direction and the authority to ensure that the regulations and duties it imposes on telephone companies recognize these differences. Certain exemptions for smaller local exchange companies providing service in rural Texas may be necessary to protect the interests of those communities.

Recommendation 5: Direct the Commission to complete its costing and pricing procedures to ensure that rates for telecommunications services are fair and reasonable for Texans.

Determining the Cost and Price of Services. The Legislature should require the Commission to complete its costing and pricing proceedings and to adopt a pricing rule within 180 days of completion of the costing proceeding.

The Commission is currently involved in proceedings to identify the cost incurred for services and functions provided by local exchange companies. These proceedings require the preparation of cost studies which involve a high degree of technical expertise, great expense and long periods of time. The Commission should be required to complete these proceedings. Properly determining the cost of services and network functions is the foundation for telecommunications competition and consumer protection in the new era of telecommunications regulation.

These cost studies, and the implementation of the pricing rule based on the studies, are crucial to a number of the recommendations outlined in this report. A common regulatory goal has been to maximize social welfare by promoting universal service. This universal service goal has been achieved by maintaining affordable rates for basic residential telephone service. There has been a long-standing debate over the extent to which affordable residential rates have been subsidized by rates from other services, such as business and long distance services. The costing and pricing procedures will provide us with the necessary information to determine the size and nature of the subsidy. From this it will be possible to fashion new policies on universal service based on actual cost and price information. The costing and pricing procedures will provide us with the necessary information to adjust our polices to the benefit of consumers and telecommunications providers.

In the future, the information obtained from costing and pricing will also be used by the Commission to determine the appropriate cost for interconnection and resale rates, and the price floor and ceiling of services in categories II and III in the regulatory flexibility proposal outlined earlier in this report. In addition to completing these proceedings, a time frame for adopting the pricing rule should be established.

Prevent the Cross-Subsidization of Services. In an environment where a company provides both monopoly and competitive services, monopoly services should not be allowed to subsidize competitive services. In order for this policy to be enforced the Commission must know the true cost of services.

Recommendation 6: Implement policies to ensure nondiscriminatory treatment of all telecommunications carriers in a multi-provider environment.

In a market that has more than one provider of telecommunications service it is important that the providers receive non-discriminatory treatment in business transactions that are essential to their ability to provide service. Other policies that were created in a monopoly environment will need to be adjusted to recognize the introduction of competition.

 Non-discrimination policies. The Legislature should ensure that no telecommunication carrier is discriminated against as to such things as franchise terms and conditions, access to buildings, the rates, terms and conditions of pole attachments and the granting or denying of right-of-way.

The ability of municipalities and property owners to unreasonably discriminate against telecommunications providers has been identified as a common barrier to the entry of competition. This proposal is designed to provide the same protections to all providers of telecommunications services as is currently provided to local exchange companies. For any franchise or contract that is entered into after September 1, 1995, certain standards should apply.

- Municipalities. The Legislature should prohibit municipalities from discriminating against CCN or COA utilities as to: the granting or denying of a franchise, the terms and conditions of a franchise, access to buildings, pole attachment rates, terms and conditions to an extent not preempted by federal law and the granting or denying of right-of-way.
- Property Owners. The Legislature should prohibit property owners from interfering with or preventing a CCN or COA holder from installing service requested by a tenant, discriminating against CCN or COA holders in installing services for a tenant, demanding or accepting inappropriate payment from a tenant or CCN/COA holder for allowing the utility on the owner's property, or discriminating against a tenant because of the utility from which the tenant receives services.

A public or private property owner may require the



utility to install facilities in a safe manner and indemnify the owner for damage during installation, operation or removal of facilities and may require the tenant or utility to bear the entire cost of installation, operation or removal of the facilities.

Directory Listings. In order to ensure non-discriminatory treatment regarding the terms and conditions of directory listings and directory assistance information, the Commission should have the authority to resolve disputes between the local exchange company and the new provider.

Universal Service Fund. The Legislature should maintain its commitment to providing universally available, affordable telephone service to all citizens in the state as competition becomes more prevalent in the telecommunications industry. Support for high cost rural areas and tel-assistance programs should be retained. In order to carry this policy forward certain changes to the universal service fund will be necessary. Currently the universal service fund is overseen by the Commission and contracted out to the Texas Exchange Carriers Association. The fund should now be administered by a neutral administrator. All telecommunications providers should be required to pay into the fund and should be assured that the money is disbursed in a manner that does not negatively impact any telecommunications provider.

Recommendation 7: Develop polices that protect the privacy of Texans by prohibiting the use of customer proprietary network information for commercial purposes, other than to provide telephone and enhanced services.

The Legislature should prohibit local exchange companies from using customer proprietary network information (CPNI) for commercial purposes other than to provide telephone and enhanced services. Customer proprietary network information is data that can be compiled by telecommunications providers about their consumers. In its simplest form, CPNI is billing and accounting information such as names, addresses and phone numbers-similar to what is published in phone directories. The local exchange company databases today contain information on virtually every consumer in Texas. This information was acquired involuntarily from customers who must use the monopoly services of telephone companies. However, the result of future telecommunications changes will be to greatly expand CPNI to include a wealth of information about consumers. As the number and types of telecommunications services grow, CPNI will expand to include not only call detail and billing information, but more personal information such as political views, entertainment preferences, products ordered, and banking transactions made. A compilation of telecommunications data could reveal an astonishingly accurate profile of each telephone customer.

Consumers should be protected from unwanted use of CPNI for marketing and other purposes that invade pri-

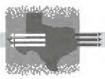
vacy. While the wiretap laws may protect consumers from some of these abuses, consumers would be better protected with specific provisions enacted in the statute that governs the actions of telecommunications providers.

The CPNI data at issue here could be extremely valuable for marketing and research purposes. For example, if greater competition is allowed into the telecommunications system, most calls will still have to go through the switch maintained by the LEC. The LEC will then have the necessary customer information to market its services to customers of other companies. Even larger marketing issues will arise when consumer preferences are accessible by compiling telecommunications information. This data will allow marketers to target advertisements directly to telephone customers who fit a certain profile. This same data could also be useful to anyone who wanted to research the lifestyles of specific persons. It is this final ability that could strip individual privacy protections away from most people.

Current rules adopted by the Federal Communications Commission (FCC) grant telecommunications customers the right to restrict the use of their CPNI by the LECs' marketing personnel. However, because so few telecommunications customers in Texas were aware of privacy rights in this area, PUC adopted a rule, on September 7, 1994, concerning CPNI. This rule requires LECs to annually notify customers of the right to restrict the use of personal CPNI. After the customer specifically requests the LEC to restrict the use of CPNI, the LEC may not use CPNI to market enhanced services to residential customers.

Recommendation 8: Provide safeguards so that local exchange companies getting into new business ventures such as audio and video programming, information services and electronic publishing compete on a level playing field with other competitors in the market.

- Electronic Publishing. The Legislature should place certain restrictions on Southwestern Bell's conduct of business in electronic publishing such as requiring them to form a separate affiliate to provide electronic publishing. The affiliate should be required to maintain separate books, employee transfers should be restricted and certain requirements should be placed on Southwestern Bell in its dealings with this affiliate, and provide certain other safeguards.
- Audio and Video Programming. The Legislature should require large local exchange companies to provide audio and video programming through separate subsidiaries, and provide certain other safeguards. Local exchange companies may not sell advertising agency services to non-affiliates but may continue to promote or sell telephone services and promote the use of the network. If an affiliate of a local exchange company does engage in advertising agency activities, certain safeguards will apply.



Broadcast Carriage. The Legislature should require any programmer which uses the video dialtone network of a local exchange company to transmit fifty or more video channels to carry free of charge at least six broadcast television stations in every market, except in Houston, Dallas, and San Antonio where at least nine stations must be carried. Similar requirements should apply to programmers offering 12 or more audio channels to ensure, that with emerging technologies, the public continues to have access to local news, weather, sports, local affairs programming and emergency broadcasts.

These safeguards will ensure that the local exchange company does not have an unfair advantage as it enters into markets where it provides essential services to competing companies by providing for the actual separation of companies, guarding against discrimination, preventing cross subsidization and protecting the privacy interests of consumers.

Recommendation 9: Establish a flexible regulatory policy for small telephone companies and cooperatives with fewer than 31,000 access lines and provide for the partial deregulation of telephone cooperatives.

Telephone Cooperatives. The Legislature should provide for the partial deregulation of telephone cooperatives. Telephone cooperatives are non-profit local exchange carriers that are owned by their customers. These cooperatives were initially set up in Texas in the 1950s to provide telephone service to people living in rural areas and are generally run by a board of directors elected by the consumer-members. The PUC regulates all 23 telephone cooperatives in the state, which range in size from 37 access lines to more than 20,000 access lines. These cooperatives provide telephone service to more than 100,000 people, primarily in rural areas. The PUC also regulates the rates cooperatives charge long-distance companies for access to their local network. In this respect longdistance companies are consumers of a cooperative's services, but are not actually members of the cooperative.

In 1978, the Legislature allowed cooperatives to change rates without regulatory review under a streamlined process. This streamlined process may be used if the telephone cooperative gives its consumers notice of the rate, the change does not exceed the statutory maximum, and the consumers do not petition the PUC in protest of the change. There have been further efforts made to deregulate telephone cooperatives. In 1989, the Governor's Task Force on Public Utility Regulation recommended that the Legislature consider whether there is any need to continue regulating cooperatives. In 1991, the Texas Performance Review also recommended partial deregulation of telephone cooperatives and the 72nd Legislature considered exempting telephone cooperatives from regulation by the PUC. Other legislation that same session attempted to provide for more flexible regulation under the current statute. To date, however, no legislation regarding the deregulation of telephone cooperatives has become law.

While cooperatives are monopolies, their structure does not require the same level of regulation as for-profit utilities require. Although telephone cooperatives are monopolies, they are consumer-owned so the need to protect consumers is reduced. As the purpose of regulation is to protect consumers from unreasonable prices charged by monopolies, cooperatives should be partially exempted from regulation.

• Small Local Exchange Companies. The Legislature should allow cooperatives and telephone companies with fewer than 31,000 access lines to offer extended local calling service, make minor rate changes, and offer new services without PUC review. Safeguards against abuses should continue to be provided.

Although the differences between large and small telephone companies are vast, PURA and PUC rules make few distinctions between these two groups for regulatory purposes. It has been argued that regulatory costs are particularly burdensome for small companies, defined as those with fewer than 31,000 lines. These companies often cannot afford to hire the additional staff needed to litigate a rate case. In many cases, the cost of filing a case is greater than the additional revenue a successful rate filing could bring.

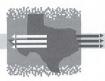
As the same regulations are applied to both 1,000 access-line companies and to 7,000,000 access-line companies, disproportionate hardships are placed on small companies with limited resources. Unnecessary regulation of small companies contributes to higher costs which are then passed on to their consumers. The regulatory burden on small telephone companies could still be reduced and provide safeguards against possible abuse.

On December 1, 1994, the Commission approved a rule on small company regulatory flexibility. This rule goes a long way in addressing the committee's concerns to reduce the regulatory burden on small companies. However, statutory change is still necessary to address some of the policy issues at hand and ensure that the Commission's rule is upheld. The Commission should also review its rules, procedures and reports regarding small companies to eliminate any other unnecessary burdens.

Recommendation 10: Create a rural scholarship fund for students in rural Texas.

The Legislature should authorize a local telephone company or cooperative with less than 50,000 access lines to give money from presumed abandoned property to a scholarship fund for rural students, instead of giving it to the state treasurer, as is required by state law.

Under current law, local telephone companies annu-



ally deliver unclaimed property funds to the State Treasurer with verification that the property is abandoned. The Treasurer deposits these funds in the unclaimed money fund. This fund is used to pay claims of persons who establish ownership of unclaimed properties. After all claims are settled, half of the balance is deposited in the foundation school fund. The other half is used to fund a \$1.2 million grant to the state ethics fund and the remainder goes to the general revenue fund.

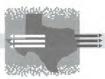
Scholarships for students from rural areas need greater funding. These unclaimed property funds now flow to the Treasurer and are distributed across the state. By giving these unclaimed property funds directly to rural scholarships, the moneys will be spent in the areas where the funds originated, thereby aiding both rural communities and higher education.

Recommendation 11: Protect consumers from unreasonable long distance charges at private pay telephones and prohibit these providers from charging for certain calls. Require private pay phone providers to register with the Public Utility Commission.

The Legislature should prohibit pay telephone

providers from charging for local directory assistance calls or 9-1-1 calls and limits should be placed on the amount pay telephone providers may charge for long distance telephone calls. The 71st Legislature exempted private pay telephone owners in 1989 from the definition of telecommunication utilities in PURA, exempting them from Commission regulation. Private pay telephones are those pay phones provided by someone other than the local exchange companies. The only jurisdiction the Commission currently has over these providers is requiring them to meet minimum service standards and comply with certain Commission requirements when using storeand-forward technology in order to obtain services from a local exchange company. A private pay telephone provider must: post certain information at the telephone; allow access to the local exchange company and to long distance carriers; provide emergency call routing and meet other minimum service standards.

The safeguards described above will protect consumers from some of the more common abuses described by consumers of pay telephones. The legislature should also consider proposals which will lower the business costs for independent payphone companies as they lower the rates they charge for service.



APPENDIX I

COMMENTS BY REPRESENTATIVE DEBRA DANBURG

1. The Joint Committees on Telecommunication and the Public Utility Commission's Report to the 74th Texas Legislature is silent or close to silent on the issue of Integrated Services Digital Network (ISDN) technology. If we guarantee non-discriminatory access to ISDN lines, we will have advanced Texas' position in the world market. This is at the heart of the most critical benefits that we should ensure for all consumers, be they media users or constituents.

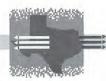
In Accordance with the Public Utility Commission's Project No. 12756, Proposed Rule 23.69, Integrated Services Digital Network (ISDN) Rulemaking, I urge the Legislature to advance the PUC's position on ISDN technology and to in no way constrain the PUC's authority.

- 2. In Addition to the Interim Committee's recommendations on payphones, it is this member's position that stronger recommendations be included in the final bill regulating payphone providers and protecting payphone users. Payphone providers already have indicated that they can live with stronger consumer protections, as evidenced by the agreements incorporated in the failed legislation in the 73rd Session.
- This committee member believes that the "three basket" or three tiered approach to competition regulations is contrived and not terribly constructive for the debate.
- 4. Consumers would be best served by having universal caps on price rates of all providers and consumer oriented guarantees (regulation) of all providers before a telecommunication provider can compete in the state. Consumers could be well served by what is termed "competitive pricing" and even "predatory pricing", so long as we disallow high penalty charges for terminating contracts with low cost providers. Few consumers would acknowledge that they are beneficiaries of a practice of setting price floors below which competitors cannot set charges.
- 5. The state should implement substantial regulations regarding cellular telephone service. Abuses have been complained of, particularly in the areas of termination charges and other "hidden costs".

COMMENTS BY REPRESENTATIVE DELWIN JONES

Following are my recommendations for the final report of the Joint Interim Committees on Telecommunications and the Public Utility Commission.

- 1. I am opposed to establishing a pilot project for retail wheeling. The effort to test retail wheeling is a first step toward allowing unregulated business interests the opportunity to steal select customers from regulated utilities. In addition, the impact of retail wheeling on small consumers needs further study.
- 2. I think recommendation #20 (in Chapter Two) should be totally removed from our report. Authorization of this item would create a welfare department within the PUC. This would be a horrible thing to do at the expense of responsible consumers.
- 3. Recommendation #2 (in Chapter Two) should be modified to limit the degree of involvement that the PUC may have in resource planning of the utility companies. We should delete the word include and use specify as a replacement. Stated more clearly: "specify in legislation the limited degree of involvement and over-sight delegated to the PUC in integrated resource planning to be that of reviewing and certifying a utility's plan and establishing a general framework for enabling a competitive wholesale market through the resource solicitation process and requiring that all utilities which provide service at retail submit to the IRP process.
- 4. Recommendation #8 (in Chapter 2) should recommend a reasonable, but specific time limit within which to conclude the CCN proceeding.
- 5. In Recommendation #11 (in Chapter 2) delete "further study be made of the" and add any rules written by the PUC concerning cost cap proposals shall include provisions to allow the utility to retain the difference between the lowest qualified bid and the actual construction costs.
- I am opposed to recommendation #14 (in Chapter 2).
 This would require rate paying consumers to subsidize the cost of renewable energy regardless of the practicality of such energy.
- 7. I am opposed to recommendation #16 (in Chapter 2). This allows the PUC to authorize a CCN and then by hindsight revoke the authorization after the utility may have spent tons of money under the original approval. This would severely damage a utility's ability to secure funding for needed projects.



- 8. I am opposed to recommendation #23 (in Chapter 2). If this recommendation were approved it would weaken the consumers present protection through the OPUC and circumvent the state's budget process.
- 9. We should not try to re-structure the PUC at this time. We may damage the creature that we seem to be trying to strengthen, therefore, I am opposed to recommendation #2 (in Chapter 1).
- 10.Recommendation #31 (in Chapter 2) should include power marketers. This was a subject that was agreed upon by the NewTex group and AECT. This oversight should be corrected before the final report is printed. Certainly, we should include power marketers in the proposed legislation when it is drafted.

COMMENTS BY SENATOR JOHN LEEDOM

The complexity and consequences of the issues charged to the Joint Interim Committees on Telecommunications and the PUC are demonstrated by the prolonged inability of industry and consumer interests to reach agreement on many points.

Such matters include defining the role of the OPUC in PUC proceedings and fully defining the PUC's role regarding complaint procedures and administrative penalties, revocation of CCNs, pricing practices in a more competitive electric marketplace, and telecommunications cost and pricing policy. They also include: the definition of, responsibility for, and administration of IRP and DSM requirements; the future of electric "retail wheeling" in Texas; revision of the rate-setting process for electric utilities and telecommunications; treatment of stranded investment; wholesale power rate regulation; city jurisdiction over electric facilities; the state's investment in advanced telecommunications infrastructure; and treatment of utilities' federal income taxes for rate setting purposes.

Additional matters, which I oppose, include proposals that would unnecessarily expand regulatory intrusion, such as extending PUC jurisdiction to books and records of non-utility competitors and requiring that the PUC include intangible assets in a utility's rate base. I also oppose proposals that clearly undermine the public's financial interest, such as authorizing the PUC to include charitable donations as utility expenses.

The difficult issues have been clearly defined and discussed at length. It is time for the legislature to take distinct action to set forth positive public policy that will serve Texas's needs in the years ahead. Further debate without action will only continue to add to the confusion that has been allowed to be interjected into the months of discussions and negotiations culminating in this report.

THE APPROPRIATE SENATE AND HOUSE COMMITTES MUST COMMIT TO CONDUCT DEFINITIVE DISCOVERY, DEBATE, AND VOTE IN AN EFFECTIVE MANNER ON THE CRITICAL ISSUES THAT HAVE TO DATE DEFIED CONSENSUS. I strongly recommend that we take the time, once bills have been introduced, to hold joint meetings of the Senate and House committees on Thursday and Friday afternoons until all issues have been resolved and resulting bills are passed from committee to the full legislature.

COMMENTS BY SENATOR PEGGY ROSSON

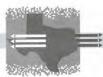
Only the Pentagon has managed to come up with more jargon and acronyms than have the utilities and their regulators. In addition, the most fundamental principles of utility regulation were established in case law dating back to the turn of the century. Consequently, for those lucky enough not to be immersed in the subject matter on a daily basis, understanding the history and subtle nuances of seemingly reasonable proposals for changes in the regulatory process becomes about as difficult as convincing a cowboy that he "really should get in touch with his feelings"...in public!

Nevertheless, this report deals with major public policy issues involving the economic future of Texas as well as her multi-billion dollar utility industry. Both deserve our most careful stewardship and attention. The legislation we pass regarding these issues will ultimately affect every man, woman, child, business, industry, school, profession and governmental entity we represent.

It is a time of and for change, no one can doubt that. It is also a time for caution, a time to demand hard facts, not rhetoric, and a time to vigorously guard against the ever lurking law of unintended consequences.

We note in the report that it is less than conclusive and of a conceptual nature, rather than one which makes specific recommendations. We further note that the Committee did not adopt the explanatory text, merely the numbered recommendations in each chapter and that is true. However some of the recommendations are in fact very specific, and it does not seem reasonable to assume that an interested reader will simply read the list of recommendations and ignore the balance of the report.

I do not purport to be an expert on all of the issues. However, from my perspective as a former member and Chair of the Public Utility Commission of Texas, some of the recommendations, commentary and conclusions are troubling. For that reason I file these comments.



CHAPTER 1.-PUC AND OPC: STRUCTURE AND COMMON ISSUES

I agree with the Recommendations contained in Chapter 1 with the following exceptions:

As to Recommendation 9: It is true that the PUC has a problem meeting the requirement to perform a management audit on each utility every ten years. The problem is a lack of funding, particularly in the case of major utilities. In the past the Commission requested the utility being audited to voluntarily advance the cost of the audit, subject to later recovery through rates. The process and the result was undesirable. Because the utility paid for the audit and was heavily involved in defining its scope, the final product lacked credibility with the public and, at times, with the Commission. The solution is not to make the audits permissive, for they are still necessary, but to fund them.

As is pointed out in Recommendation 8, the rate payers of Texas pay far more for the regulation of utilities than they receive. In 1993 they paid \$28.6 million through a gross receipts assessment collected by the utilities and deposited into the general revenue fund. The assessment is for the stated purpose of funding the PUC and OPC, yet it annually produces more than double the combined budgets of both agencies. While it is unlikely that we will reduce the assessment, it does not seem unreasonable to set aside an amount sufficient to cover the cost of the audits from the surplus.

As to Recommendation 11: I agree with the Sunset Commission's recommendation that charitable contributions should be excluded as an operating expense recoverable in rates. The expenses which a regulated monopoly utility may recover from its rate payers must be reasonable and necessarily incurred for the provision of utility service. Charitable contributions do not meet that test. Nothing prevents the utility's shareholders from donating whatever amount they deem appropriate, but rate payers should not be required to involuntarily donate to a charity or cause they may in fact oppose.

As to Recommendations 15, 17, 18 and 19: These recommendations deal with the authority of the hearing officer or administrative law judge to control the case before them. Numbers 17 and 18 are permissive, while 15 and 19 require action to be taken by the judge. In all four instances the PUC already has a rule in place authorizing the presiding officer to perform the recommended action. The rules should be allowed to stand as they are without further legislative modification.

As to Recommendation 16: The cities, not the PUC, exercise original jurisdiction over electric utilities providing service within their corporate boundaries. The "streamlining" contemplated by this recommendation is tantamount to filing the original petition in a lawsuit with the Court of Appeals, and placing the burden on the District Court to ask for a copy. The cities oppose the recommendation, so should the Legislature.

As to Recommendation 20: I strongly disagree that a revision of the rate-setting treatment of federal income taxes is necessary. Again, a regulated monopoly may only recover from its rate payers the reasonable and necessary expenses incurred in the provision of utility service. The amount of actual taxes paid by the utility should be recovered from the rate payers, no more, no less.

CHAPTER 2-ELECTRIC UTILITY ISSUES

I am in general agreement with the Recommendations contained in Chapter 2 with the following exceptions:

As to Recommendation 12: I am not opposed to either the recovery of costs incurred for demand side management programs and purchased power, nor to the possible capitalization of DSM costs. I am opposed to the notion that such costs warrant expedited recovery as the term is used in the report. There are good reasons for the long line of decisions holding against the concept of piece-meal ratemaking. The revenue requirement of a utility, that is the amount to be collected from rate payers, is best determined by examining all expenses and all revenues at the same time. Exceptions can and have been made when it has been shown that an expense item, usually fuel, is subject, due to market forces, to such volatility and fluctuations in price that a fixed amount cannot be fairly determined for inclusion in base rates. Under those circumstances the expense is surcharged and collected as a separate item, subject to reconciliation in a later proceeding. DSM costs would not meet the test of volatility and providing for expedited recovery would simply increase the number of costly proceedings at an already overburdened PUC.

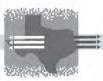
As to Recommendation 15: I strongly disagree with this recommendation. No exception to the existing levels of scrutiny of all affiliate transactions should be adopted at this time.

As to Recommendation 23: Cities choosing to intervene in an IRP proceeding should be given the same statutory authority for reimbursement of costs as is presently granted for rate proceedings.

As to Recommendation 32: There is a significant difference between retail wheeling and self-service retail wheeling. The pilot project contemplated by the recommendation appears to deal with self-service wheeling, but action relating to pure retail wheeling would be influenced by the results of the project. As written I cannot support the recommendation.

CHAPTER 3- TELECOMMUNICATIONS

I support the recommendations contained in Chapter 3. Taken together they represent a reasoned and balanced approach to opening the telecommunications market to competition while providing the regulatory flexibility necessary in a more competitive market. They also address crucial privacy issues.



Despite my support of the specific recommendations I find the remainder of the chapter most troubling. From reading the chapter, it is difficult to recall that the Committee did not, in fact, adopt the text. The impression left with the reader is quite to the contrary. In addition, despite the length of the text, the reader is left with a very incomplete picture of the current telecommunications environment and recent regulatory actions.

Specifically, I wish to call attention to three areas of concern: 1) the near absence of any statistical information demonstrating the scope or extent of competition, or lack thereof, in the local telecommunications market in Texas; 2) the report's failure to mention the Docket 8585 stipulation or the Public Utility Commission's recent staff analysis of the incentive regulation plan established under 8585, and; 3) the report's repeated suggestions that the lack of an advanced telecommunications infrastructure in Texas is primarily attributable to the state's regulatory system.

Scope of Competition. The assumption of existing competition underlies both the report and the recommendations of the Committee. Yet there is not a single piece of information contained in the report that quantifies the extent or scope of competition within the local telecommunications market in Texas. Unfortunately, the omission of such information could lead readers to conclude that competition is much more prevalent than the facts suggest. The PUC's recent 1995 Scope of Competition Report suggests that, no matter which standard is employed—revenues or customers—incumbent local exchange companies have a total or near monopoly in every segment of the market for both business and residential telecommunications services and customers in metropolitan and non-metropolitan counties alike.

For the most basic telephone service (local switched access) incumbent local exchange carriers face absolutely no competition in Texas. Moreover, even in other market segments where some competition exists, such competitive services are themselves almost always reliant on interconnection with the LEC's local switched loop. In terms of aggregate revenues, the PUC Scope of Competition Report cites a figure of \$4.863 billion total Texas revenues for local exchange companies, in comparison to the \$7.284 million in combined revenues for competitive access providers (CAP). Total reported CAP revenues constitute less than two tenths of one percent of total LEC revenues.

More to the point, even in those market segments where competition is apparently most robust, for private line services and special access services, revenue figures from the Scope of Competition Report suggest that LECs maintain huge shares of these markets. According to the report, combined CAP revenues for private line services amounted to \$3.349 million dollars, in comparison to \$92.766 million revenue for LECs. CAP revenues constitute approximately 3.5 percent of the total market for private line services. Similarly, combined CAP revenues for special access services amount-

ed to \$2.062 million, in comparison to the \$227.602 million LECs received. Assuming these figures are accurate, LECs have approximately 99 percent of the total Texas market for special access services in Texas.

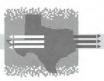
Docket 8585 and the results of the incentive regulation plan. Although the report makes frequent references to the need for an optional system of "incentive regulation", it fails to mention the fact that the State's largest local exchange company, Southwestern Bell Telephone, has been operating for the last three years under an incentive regulation plan established in the Final Order of PUC Docket No. 8585. Nor is any mention made of the recent PUC staff analysis of this incentive regulation plan and its benefits for ratepayers, SWBT, and the state's public policy goals in the telecommunications arena.

An understanding of the impact of the 8585 incentive regulation plan is absolutely essential to any effort to plan for, or legislate, the future of telecommunications. If we choose to ignore the lessons learned from the 8585 incentive regulation plan we are sure to fashion poor public policy regarding telecommunications in Texas.

While it would be impossible to recap the PUC staff analysis of the 8585 incentive regulation plan, it lays out the basic tenets of the agreement-price caps, rate reductions, system upgrades, etc. in return for a banded revenue sharing mechanism. While the analysis does suggest that there have been substantial and tangible benefits to rate payers and some upgrading of SWBT's system under this plan, it also suggests that Texas' telecommunications system continues to lag behind other states in deployment of advanced services offered by a fully digital network, and that SWBT "may have put less emphasis on economic development activities during the Plan period than before the Plan was approved." Coupled with the reported excess profits SWBT earned during the three years of the plan, it is not at all difficult to conclude that the incentive regulation plan adopted under Docket No. 8585 was not a good regulatory bargain for the people of Texas nor has it been beneficial, relative to other states, in providing the advanced telecommunications infrastructure Texas deserves.

Investment in the State's Telecommunications Infrastructure. While I concur with the Telecommunications Committee's adopted recommendation to "encourage investment in the state's telecommunications infrastructure", I take issue with the report's repeated assertions that the lack of an advanced telecommunications infrastructure in Texas is primarily attributable to the state's current regulatory structure.

In fact the burden of responsibility for Texas' status as a technological backwater rests squarely with the incumbent local exchange companies, particularly Southwestern Bell Telephone Company. Section IV of the PUC Staff Analysis of the Incentive Regulation Plan Established in Docket No. 8585 provides a number of



comparisons of SWBT's infrastructure investment in Texas with that of other Regional Bell Operating Companies (RBOC). According to this report SWBT had the lowest percent of lines served by digital switches, and the lowest percent of lines with ISDN potential, as compared to other RBOCs. More troubling, the report indicates that, until recently, Southwestern Bell had actually been disinvesting in Texas, that its annual depreciation expenses exceeded, sometimes greatly, its new investment in its Texas plant and equipment. This disinvestment occurred during the period of the Docket 8585 incentive regulation plan.

I believe the policy implications of SWBT's recent investment activities are unmistakable—moving away from rate of return regulation has not caused, and will not assure that, investment in an advanced telecommunications infrastructure takes place in Texas. Indeed, even while SWBT was allowing Texas to fall behind other states in infrastructure investment, it was making large investments in cable and telecommunications in other states outside its current service area.

In summary, as we seek a legislative resolution to the issues raised in this chapter, I urge my colleagues to pay heed to the lessons of the past.

The first lesson is that as we found in 1987, when the then dominant long distance provider, AT&T, mounted an all out effort for legislative deregulation, the mere presence of competitors does not signify a competitive market. Market share or dominance is the only valid criteria by which to determine whether an entity should remain regulated. An examination of the reality of AT&T's market share proved conclusively that the company then retained such dominance that premature deregulation would greatly inhibit the development of a competitive market for long distance services.

The Legislature wisely chose to reject AT&T's request and instead enacted Section 18 of PURA which allowed the PUC the necessary regulatory flexibility to monitor and encourage competition. The result was the competitive market which now benefits Texans. In 1993 the Legislature effectively deregulated AT&T. Any decisions

regarding deregulation of the present local exchange providers should be based on the same rigorous test and in-depth examination.

The second lesson which should guide our actions is contained in the staff analysis of Docket 8585. Our decisions should not be guided by the faulty assumption that deregulation is the quid pro quo necessary to achieve the quality of infrastructure Texans deserve. In the publicity preceding and following the settlement in Docket 8585 many glowing predictions of new jobs, advances in education and tele-medicine and a state of the art telecommunications system were made. However, as pointed out in the PUC staff analysis, Southwestern Bell increased efficiency by reducing its number of employees, record returns were shifted to the corporate parent for investment elsewhere, and SWBT continues to lag significantly behind other regional Bell companies in the deployment of digital central offices and advanced services.

Incentive regulation does not guarantee investment in infrastructure. It is clear that Texas lags behind other states in telecommunication technology, but Texans need not strike a devil's bargain in order to achieve infrastructure investment. The Legislature can and should, with the help of the PUC, determine the level of infrastructure investment needed to provide Texans with state of the art telecommunications, set milestones by which that must be achieved, and order the local exchange carriers to make it so.

COMMENTS BY REPRESENTATIVE ROBERT SAUNDERS

Until further studies are made, I oppose Recommendation 32 (in Chapter 2)—a pilot project for self-service retail wheeling. A provision which allows retail wheeling, even though initially limited to self-service wheeling within a limited distance, would tend to promote pure retail wheeling. A thorough study should be made of the impact of retail wheeling upon consumers and the industry before we take even a first step in that direction.



APPENDIX II PUBLIC UTILITY COMMISSION OF TEXAS

CREATION AND POWERS

In 1975, the 64th Legislature created the Public Utility Commission of Texas (PUC) to regulate public utilities in Texas. The Legislature found that these utilities operated as monopolies and were not subject to normal competitive forces. Regulation was established as a substitute for competition, with PUC responsible for maintaining rates and services that are fair both to consumers and to the utilities. Initially, PUC's jurisdiction included water and sewer utilities in addition to electric and telephone utilities. However, in 1986 the agency's jurisdiction over water and sewer utilities was transferred to the Texas Water Commission. The agency now regulates 10 investor-owned electric utilities, 86 electric cooperatives, four river authorities, and 61 local telephone companies. The agency estimates that the utilities it regulates have a combined annual revenue of approximately \$20 billion.

The initial duties of PUC focused on establishing each utility's service area, registering all telecommunications providers in the state, and setting just and reasonable service standards for all utilities. PUC was also charged with holding hearings to determine the propriety of proposed utility rate changes, monitoring the management and affairs of public utilities, bringing court action against utilities that violate the Public Utility Regulatory Act (PURA) or agency rules or orders, and investigating utility mergers and sales of property.

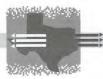
PUC's functions and responsibilities have undergone several legislative changes since 1975. In 1983, the 68th Legislature made several changes to PURA including requiring electric utilities to file a notice of intent with PUC before building new generating plants and to prove to the agency that they had considered other reasonable resource alternatives. In addition, the 68th Legislature encouraged utilities to use alternative fuels, required the agency to develop a long-term statewide energy forecast to be used in certification proceedings for generating plants, and required the agency to conduct management audits of each utility under its jurisdiction at least once every 10 years. In 1987, the Legislature required the agency to determine the existence, impact and scope of competition in the state's telecommunications industry to prepare for technological advances that would spur new competition. In 1989, the Legislature required the agency to implement the statewide dual-party relay service, known as Relay Texas, which offers a link between persons who are hearing-impaired or speech-impaired and persons with normal hearing and speech abilities. In 1991, the Legislature authorized the agency to assess administrative penalties against operators of automatic dial announcing devices (ADADs) for violations of related rules and statutes.

While numerous changes have been made to PURA, the four basic functions of the agency have not changed substantially since 1975. The first basic function of the agency is certification. Before a regulated utility can operate in the state or construct new facilities, it must first obtain a certificate of convenience and necessity (CCN) from PUC, which certifies that the utility's operation is in the public's best interest. The second basic function of the agency is rate-setting. The agency sets rates for all local telephone companies, investor-owned electric utilities and electric cooperatives operating outside city limits, and the electric operations of river authorities. Cities have retained original ratemaking authority for electric utilities and cooperatives operating within their boundaries. PUC reviews these rates on an appellate basis. The commission also reviews on an appellate basis the rates of municipal utilities serving customers outside of their city limits. The agency's third basic function is monitoring regulated utilities to ensure compliance with statutory requirements and agency policies, rules, orders, and service standards. The agency's monitoring activities also include monitoring utility earnings and conducting management audits. As its fourth basic function, the agency helps consumers resolve complaints against regulated utilities.

POLICYMAKING STRUCTURE

The Public Utility Commission (PUC) consists of three full-time, salaried commissioners who are appointed by the Governor with the advice and consent of the Senate. The commissioners serve staggered sixyear terms and elect one of their members as chair once every two years following the appointment of a new commissioner.

To be eligible for appointment as a commissioner, a person must be a qualified voter, at least 30 years of age, a citizen of the United States and a resident of Texas. A person is not eligible for appointment as a commissioner if at any time during the two years preceding his appointment he served as an officer, director, owner, employee, partner, or legal representative of any public utility or any affiliated interest, or owned or controlled stocks or bonds worth \$10,000 or more in a public utility or affiliated interest. PURA also imposes post-employment restrictions on the commissioners. For two years

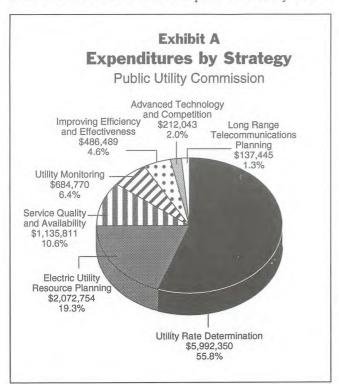


after a commissioner's appointment to the commission has ended, he is prohibited from being employed by any public utility that was in the scope of his official responsibility.

The primary role of the three-member commission is to serve in a quasi-judicial capacity on utility rate cases and other proceedings that have gone through the hearings process. commissioners hold final order meetings once or twice a month to consider the disposition of cases. In addition to issuing final orders, commissioners adopt agency rules, develop long-range agency goals and plans, and set regulatory policy. Each commissioner employs three personal staff, including two aides and an administrative assistant. The commissioners also hire the agency's executive director, general counsel, director of hearings, and special counsel.

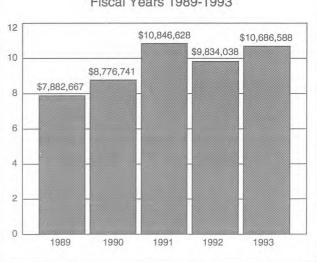
In fiscal year 1993, the commissioners issued 226 final orders and adopted 14 new rules. Of the 226 final orders issued by PUC commissioners, five involved major rate proceedings and 221 involved other cases such as minor rate proceedings, certification, inquiry, avoided cost, fuel factor, fuel reconciliation, fuel refund, complaint, and sale/transfer/merger cases.

In an effort to assist the commission in handling this heavy workload, the 72nd Legislature in 1991 authorized the commissioners to delegate to an administrative law judge or hearings examiner the authority to make a final decision in a proceeding in which there is no contested issue of law or fact, other than one involving major rate changes. Such a decision by the administrative law judge would have the same effect as a final order of the commissioners unless a commissioner requests to formally review





Public Utility Commission Fiscal Years 1989-1993



the decision. The commission implemented this change in the law in its Procedural Rule 22.32, which became effective as of November 1, 1993.

FUNDING AND ORGANIZATION

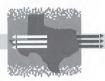
In fiscal year 1993, the agency expended about \$10.7 million out of appropriations totaling \$9.6 million plus about \$700,000 of 1992 carry-over funds. In addition, the agency received a \$350,000 rider appropriation for a contract with the Center for Energy Studies. Exhibit A shows these expenditures by strategy:

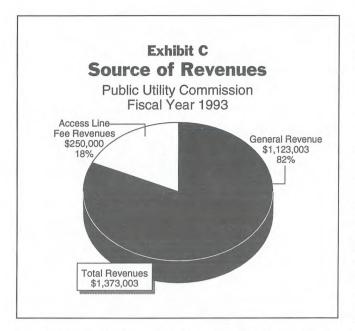
Exhibit B shows how PUC's expenditures have changed over a five year period.

Revenues to support these expenditures came from a variety of sources. Looking again at fiscal year 1993, 89.4 percent of the agency's \$10.67 million in expenditures came from general revenue. Another 8.4 percent came from access line fees, which are paid by local exchange telephone companies to recover some of the costs of regulation. The remaining 2.2 percent came from a variety of other sources, including federal funds, interagency contracts, and other funds.

Most of PUC's funding comes from the state's general revenue fund. In turn, a statutory assessment of one-sixth of one percent imposed on the gross receipts of every utility under PUC's jurisdiction is paid to general revenue to defray appropriations. Utilities are allowed to recover the assessment from ratepayers through utility rates. The gross receipts tax generated \$28.6 million in fiscal year 1993.

The agency had a total of 222.4 full-time equivalent



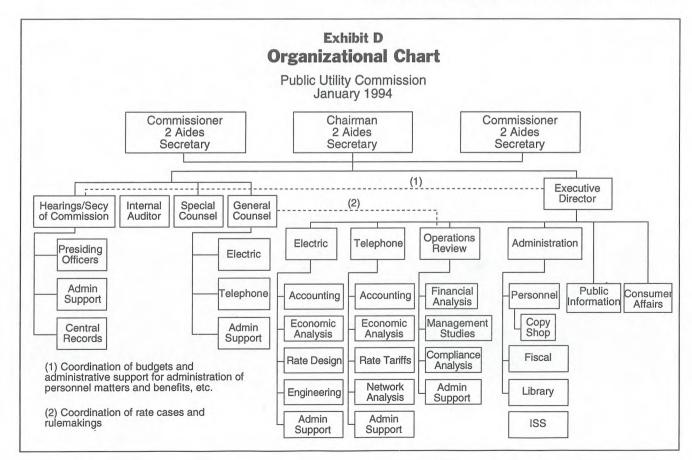


employees as of August 31, 1993, all located in the Austin office. The internal auditor, special counsel, general counsel, and director of hearings are hired by and receive their direction from the commissioners but report to the executive director on all administrative matters. Exhibit D gives a detailed breakdown of the agency by division.

Exhibit E depicts how the agency's workforce has changed over a five-year period in different categories of employment and how it compares with minority workforce goals set out in the General Appropriations Act.

PROGRAMS AND FUNCTIONS

PURA requires PUC to set utility rates and develop minimum standards for utility operations and services that are reasonable both to the utilities and to the consumers they serve. The agency carries out these duties through the commissioners' offices and seven divisions: electric, telephone, operations review, general counsel, hearings, information systems and services, and administration. The electric, telephone, and operations review divisions are primarily responsible for the evaluation of utility rates and services. Staff from these divisions testify in cases before the commission and are also involved in a number of other activities including field investigations, compliance and management audits, facility testing, and statistical research. The general counsel's division represents the public interest and coordinates staff testimony in agency hearings. The hearings division conducts public hearings, evaluates the evidence, and prepares proposals for decision with recommendations for final decisions by the commissioners. The hearings division also maintains the agency's central records office, where all official documents are kept and all filings with the agency are made. The administration and



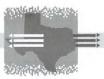


Exhibit E Percentage of Minorities in Agency's Work Force

Public Utility Commission

Job Category	1989 Total Work Force 183		1993 Total Work Force 216		1992-1993 Appropriations Act Statewide Goal for
	Total Positions	Percent Minority	Total Positions	Percent Minority	Minority Work Force Representation
Administrators	6	0%	10	30%	14%
Professionals	112	13.4%	140	20.7%	18%
Technicians	8	12.5%	7	28.6%	N/A
Protective Service	N/A	N/A	N/A	N/A	48%
Para-Professionals	N/A	N/A	12	25.0%	25%
Administrative Support	57	29.8%	44	40.9%	25%
Skilled Craft	N/A	N/A	3	66.7%	N/A
Service/Maintenance	N/A	N/A	N/A	N/A	N/A

information systems and services divisions provide support to the commissioners' offices and the other divisions.

As explained previously, the basic functions of the agency include certification, setting rates, monitoring, and customer assistance. These functions are summarized in the following material.

Certification

The first basic function of PUC is certification. Before a utility can provide service to an area or build generation facilities or transmission lines, it must get a certificate of convenience and necessity (CCN) from the agency. PUC grants a CCN after determining that a utility's services and facilities are necessary and in the public's best interest. The CCN also defines the geographical areas that the utility will serve. Ownership of a certificate legally obligates a utility to serve anyone in the area. If a utility wishes to change its service area, make major modifications to its facilities, build new facilities or engage in the sale, transfer, or merger of the utility, it must apply to PUC for an amendment to its certificate. Following the passage of PURA, one of the agency's first tasks was to certify all existing electric and telephone utilities' services, facilities, and geographical areas. Utilities under the agency's certification jurisdiction include electric and telephone investor-owned utilities and cooperatives and municipally-owned electric utilities. Telephone utilities are certified for service and geographical areas. Most electric utilities are certified for service and geographical areas as well as for the construction of new generation facilities and the extension of transmission lines. Municipally-owned electric utilities are subject to service area certification only.

Current certification activity centers around new electrical power generation and the extension of electric transmission lines. Before filing for a CCN for a new generating facility, an electric utility must first file a notice of intent (NOI) and undergo a hearing. The NOI hearing identifies the alternative methods the utility has considered, other than construction of a new plant, to help meet the area's electrical needs and the advantages and disadvantages of the alternatives. In addition, the NOI application must indicate compatibility with the utility's most recent long-term energy forecast, which indicates the utility's forecasted demand for energy and the utility's plans for meeting that demand. In fiscal year 1993, the agency considered and denied one NOI application for the construction of a new power plant.

Once the NOI has been approved, the commission may not grant a CCN until it has considered the adequacy of existing service in the certified area, the need for additional service, and the effect of granting a certificate on the utility and on any other utility serving the same area. The commission must also consider such factors as community values, recreational and park values, historic and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers. In fiscal year 1993, the agency approved 22 CCN applications for the construction of electric transmission lines.

The NOI and CCN proceedings are similar to the agency's rate-setting proceedings in that the hearings officer sets a prehearing for the parties involved, a hearing is held, a report is issued, and the commissioners render a decision in a final order meeting. Parties may file written responses and offer oral argument before the commissioners in a similar fashion to rate proceedings.



One key difference between rate cases, NOIs and CCNs is that while both rate cases and NOIs have set statutory time limits for completion, there is no set time limit for addressing a CCN, except for CCN proceedings involving new transmission lines. The statute requires PUC to act on transmission line CCN applications within one year. The NOI has a statutory time limit of 180 days.

Setting Rates

PUC's second key function is setting rates. PUC has original jurisdiction to set rates and service standards for all local service telephone companies. Because there is significant competition among the long-distance carriers, the agency does not have jurisdiction to set rates for these companies. The agency also has original jurisdiction to set rates for investor-owned electric utilities and electric cooperatives operating outside city limits, and the electric operations of river authorities. Cities have always retained original ratemaking authority for electric utilities and cooperatives operating within their boundaries. Electric utilities subject initially to city ratemaking, except for city-owned utilities, may appeal city rate decisions to PUC. Typically, investor-owned utilities' rate cases are filed with cities at the same time they are filed with PUC and are later consolidated into a single proceeding before PUC. PUC reviews the rates set by cities in a rate case and has the authority to reset the rates as needed. Upon appeal, the commission also reviews the rates of municipally-owned utilities that serve customers outside city limits.

PUC sets a utility's rates by determining the utility's revenue requirement and rate design. First, PUC sets the revenue requirement, which is the total amount of revenue required by the utility to pay its annual operating costs and earn a reasonable rate of return on invested capital. The allowed rate of return is a percentage figure used to calculate a utility's profit. The percentage is applied to the utility's capital investment. Capital investments include such items as the value of the utility plant after depreciation, the value of land that has been purchased as locations for future power plants, the cost of construction projects that may take several years to complete, cash, working capital, fuel inventories, prepayment of operating expenses, and inventories of materials and supplies. In recent years, approved rates of return for investor-owned utilities have generally ranged from 9.5 percent to 11.0 percent depending on the utility's cost of capital. Rates of return for cooperatives and river authorities are typically lower and are based on the amount of revenue required to support a utility's financial soundness. In 1983, the Legislature authorized the agency to consider quality of management and efficiency of operations in determining a utility's rate of return. A utility may also be granted a higher or lower rate of return as a result of its efforts in conservation and demand-side management programs.

After setting the revenue requirement, PUC must determine the rate design, which is a breakdown of how the revenue requirement will be divided among the utility's customer classes. Electric customer classes typically

Exhibit F Rate Case Time Line

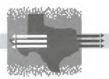
Public Utility Commission

Day	Activity
1	Case Filed
35	Effective Date (PURA) Normally extended an additional 150 days
100	Hearing Begins (general practice)
120	Hearing Ends (general practice)
150	Examiner Report Issued (general practice)
175	Final Order Meeting (general practice)
185	PUC's Jurisdiction Ends* (PURA)
200	Deadline for Motion for Rehearing
210	Deadline for Replies to Motion for Rehearing
230	Deadline for Appeals
* This	(PURA) Statutory dates in the Public Utility Regulation Act deadline may be extended if the hearing lasts longer than 15 days.

include residential, small commercial, large commercial, industrial, street lighting, and security lighting customers. Telephone customer classes typically include one-party residential, multi-party residential, one-party business, and multi-line business customers. PUC must allocate each element of the costs that make up the revenue requirement among the customer classes according to each class's share of responsibility in generating the cost. A rate, or set of rates, is then designed for each customer class. In electric utility cases, that allocation is made according to each class's share of responsibility in generating the cost. A rate or set of rates is then designed for each customer class to cover those costs and generate a utility's revenue requirement. In telephone utility rate cases, the cost allocation method is not as well developed as it is for electric services. Many telephone services are priced based on incremental costs, and others are based on allocated costs. Rates for the various classes of telephone service are designed so that the total revenue requirement of the utility is attained. PUC has four key types of proceedings related to setting rates: rate cases, fuel-related proceedings, avoided cost proceedings, and tariff reviews. Each of these proceedings is described below.

■ Rate Cases

PUC's regulatory process for hearing a rate case can be broken down into five phases: reviewing the rate filing package, preparing for the administrative hearing, conducting the administrative hearing, conducting the final order hearing, and responding to appeals of the final order. These phases are described in the following material. Exhibit F shows the current time lines for each phase of the process.



At any point in the rate case process all or some of the parties to a case can settle the case informally through a stipulated agreement. Such settlements must be approved by PUC before they are final.

■ Phase 1: Reviewing the Rate Case Package

A telephone or electric rate case begins in one of two ways. Generally, the utility files a request with PUC when it has determined that a rate increase is needed. However, PUC also has authority to initiate an inquiry to adjust a utility's rates if it determines through its earnings monitoring program that the utility is overearning. In either case, PURA places the burden of proof on the utility to show that its rate request or current rate structure is reasonable and necessary. The utility must file a rate filing package with the agency's hearings division, where it is assigned a docket number. The rate filing package includes written testimony by the utility's expert witnesses on important issues, along with data and exhibits supporting the testimony. The utility also submits a price and service schedule by type of customer with the proposed rate design and service policies. When the utility files a rate filing package, the agency begins processing the case and must issue a final decision within 185 days according to PURA. The 185day statutory deadline can be extended if the hearing in a case takes longer than 15 days. The 185-day deadline is extended by two days for each day that the hearing goes beyond 15 days. The 185-day statutory deadline does not apply to rate inquiries initiated by PUC. In fiscal year 1993, 151 rate cases were filed by utilities.

■ Phase 2: Preparing for the Administrative Hearing

Once a rate case has been assigned a docket number, the director of hearings selects a hearings officer to preside over the case. The hearings officer sets a date for a prehearing conference where participants in the case will settle issues of procedure, identify intervenors, set deadlines for submitting evidence and testimony, and set a date for the start of the hearing. In fiscal year 1993, the hearings division completed 101 rate cases.

If the agency staff or other intervenors to the case need additional information from the utility or other parties, they may file formal "requests for information" (RFIs). Many parties, including the general counsel, regularly issue standard RFI's to fill in gaps left in the utility's rate filing package. All parties, including PUC, are required to respond. The discovery process is time-consuming and often contentious, but it is also a key element in the preparation of the staff's case and other parties' cases. The PUC staff testimony is filed seven days before the rate hearing begins, which allows interested parties a brief period to prepare their cases supporting or attacking the staff's position. Other parties must file their testimony two weeks before the hearing starts.

Depending on whether the case is a telephone or electric rate case, staff experts from either the electric or telephone divisions will file testimony on accounting, engineering and rate design issues pertinent to the case. Staff accountants review company records and may conduct on-site audits to establish the utility's costs of providing service. Staff engineers evaluate the costs and investigate the quality of the utility's service. Other staff members design an appropriate rate structure, which may or may not differ from that proposed by the utility. In fiscal year 1993 staff renewed 461 docketed cases and completed 315 utility tariff application reviews. Additionally, 271 cost of service studies were performed and cost studies reviewed.

Financial analysts from the agency's operations review division examine the utility's cost of capital and financial health and recommend a rate of return the utility should be allowed to earn on its invested capital. These analysts also file testimony as needed on rate moderation, interim rates and other financial issues. In fiscal year 1993, this division filed 22 testimonies and 14 recommendations by memorandum in rate case proceedings at the agency, an increase of five percent over fiscal year 1992.

The agency's general counsel is charged with representing the "public interest," which is defined in law as "the assurance of rates, operations, and services which are just and reasonable to both consumers and the utilities." The role of the general counsel is to examine all interests affected by a case, including parties not formally represented, and to present a staff case that includes a balanced approach for the hearings examiner and the commissioners to consider when deciding the case. The general counsel's office coordinates the development of the staff case, reviews the staff experts' testimony, and prepares the staff case that will be presented in the hearing.

■ Phase 3: Conducting the Administrative Hearing

The administrative hearing usually begins around the 100th day after the rate case filing. The hearing is usually divided into two sections: determining the utility's revenue requirement, which includes operating costs and a return on its investment; and determining the rate design, which allocates the revenue requirement among the utility's customer classes and sets the utility's rate of return for each customer class.

When the hearing is convened, the utility must prove whether a rate increase or decrease is reasonable and necessary. The hearings officer hears testimony on issues in the case from utility witnesses, agency staff and intervenors such as industrial groups, cities, consumer groups, and the state's Office of Public Utility Counsel (OPUC), which represents the interests of residential ratepayers and small business consumers. During the hearing all parties have an opportunity to present their cases and cross-examine other parties' witnesses. The utility may present rebuttal evidence to refute the positions of other parties. All parties then make closing statements or file legal briefs summarizing their positions.

After the hearing has adjourned, the hearings officer



weighs the evidence and writes a proposal that makes recommendations to the commissioners, including a proposed revenue requirement and rate design. This proposal is distributed to the utility, the intervenors, and agency staff involved with the case. Parties who disagree with the hearings officer's proposal may file exceptions. A party may also file replies to exceptions filed by other parties.

■ Phase 4: Conducting the Final Order Hearing

The agency's three full-time commissioners meet regularly in open meetings to consider the disposition of cases. After reviewing the hearings officer's recommendations and parties' exceptions to the proposal for decision and listening to oral arguments, the commissioners may vote to accept the proposal as written, accept the proposal with modifications, reject the proposal and issue a final order with the commissioners' own findings of fact and conclusions of law, or remand the case for further hearing. The decision rendered by the commissioners is called a final order. In fiscal year 1993, the commission issued 94 final orders in rate cases.

■ Phase 5: Responding to Appeals of the Final Order

After the commissioners have issued their final order, any intervenor or the utility may file motions for rehearing. Parties may continue to file motions for rehearing every time the commissioners change the final order until all motions for rehearing have been denied. Any intervenor or the utility may then appeal the case to district court if the commissioners' final order is still unacceptable to them. Upon notice of appeal, the director of hearings, who also acts as secretary to the commission, turns over the case records to the state's Attorney General, who handles appeals for PUC. The general counsel also coordinates efforts with the Attorney General's Office on matters of appeal. In fiscal year 1993, eight rate cases were appealed.

■ Fuel-Related Proceedings

In addition to the rate case proceedings, PUC also has established three fuel-related proceedings: fuel factor, fuel reconciliation and fuel refund. In a fuel factor proceeding, the agency takes a forward look at the known or reasonably predictable expenses to be incurred by an electric utility for fuel in a future rate year in order to set a fuel factor. This fuel factor is used to figure the monthly amount charged to customers to allow the utility to recover its fuel costs. Conversely, the fuel reconciliation proceeding takes a backwards look at the utility's fuel procurement practices and actual costs of fuel for a previous period of time. In this proceeding the actual fuel costs are examined to determine their reasonableness and are compared with the fuel factor to determine whether the utility has been over or undercharging its customers for fuel. Generally, these two proceedings are part of a rate case, but can be held separately. Fuel refund proceedings, however, are often handled without a hearing. In such a proceeding, excess fuel revenues are refunded to electric customers. These refunds are subject to later review by the commission in the utility's fuel reconciliation hearing.

■ Avoided Cost Proceedings

PUC also conducts individual avoided cost hearings for each utility every two years. In an avoided cost hearing, PUC establishes the price utilities may pay qualifying facilities for their power. A qualifying facility is usually a company that produces electricity and steam for its own industrial use but has additional power to sell to utilities. The "avoided cost" is simply the cost the utility would have incurred by building a power plant to produce power instead of buying power from the qualifying facility. If a utility can purchase needed power from a qualifying facility below this cost, it has avoided the higher cost of providing the needed power by building new power plants. Utilities are required to buy power from a qualifying facility instead of building a new plant if the qualifying facility can provide power below the utility's avoided cost.

■ Tariff Reviews

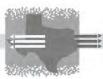
Utilities must request commission approval for changes to their service tariffs, which are documents that describe in detail the components of specific services offered by the utility and the rates that may be charged for those services. Changes in tariffs are reviewed by the staff to ensure that they are just and reasonable. Tariff applications are usually processed administratively, unless a party intervenes or the staff finds the application to be controversial, in which case it becomes a docketed proceeding. Once docketed, the application goes through the formal hearings process and receives final approval from the commission. The staff processes about 400 telephone tariff applications and about 100 electric tariff applications each year.

MONITORING

After the basic framework of a utility's operation is decided through PUC's certification and rate-making authority, the agency monitors these operations to ensure compliance with agency orders and standards. Monitoring is done in several ways, including review of various reports required of the utilities and on-site inspections of a utility's facilities and equipment.

The agency has also established monitoring programs that include earnings analysis, fuel reports analysis, management auditing and compliance auditing for utilities regulated by the agency. The agency's earnings monitoring program reviews earnings reports that are submitted by investor-owned utilities semi-annually and by cooperative utilities annually. These reports are used to determine whether the utility is over-earning by comparing the reasonable rate of return that each utility should be earning with the actual return being earned. If a utility appears to be over-earning, the staff recommends that the general counsel initiate a rate investigation, which may lead to a rate case and a reduction of the utility's rates.

The agency also conducts management audits as part



of its monitoring program. In 1983, the Legislature required the agency to conduct a management audit of each regulated utility at least once every 10 years. The resulting management audit report helps the agency stay informed about utility management and provides recommendations to the utilities for improved efficiency, effectiveness and cost savings.

The management audits are conducted by agency staff or by an outside consultant depending on the size and ownership of the utility. Outside auditors are needed for large investor-owned utilities due to limited agency staff and resources. For these outside audits, agency staff coordinate the auditor selection process, act as project manager during the audit, and monitor the utility's implementation of the audit's recommendations. Since the agency has no specific funding for consultants, the utility being audited must agree to pay for the outside consultants and is allowed to recover the cost through utility rates. Since the agency has no specific funding for consultants, the utility being audited must agree to pay for the outside consultants and is allowed to recover the cost through utility rates. The commission has not initiated any consultant audits in the past four years. The number of audits conducted each year depends on the size of the utilities to be studied, the scope of the audits and the complexity of the issues to be addressed. In the 10 years the agency has been conducting management audits, 62 out of 161 utilities subject to the management audit requirement have been audited, with four completed in fiscal year 1993. The audits have resulted in annual savings of more than \$130 million, with much of the savings coming from reduced fuel costs for electric utilities.

The agency also conducts compliance audits, which review a utility's compliance with the customer-related sections of PURA and the agency's substantive rules, such as those covering billing and deposits. Compliance audits ensure that customers are billed in accordance with approved tariffs, are adequately informed through required utility publications, and are allowed adequate time and opportunity to pay their bills. Follow-up audits are conducted to verify that the utility has implemented the staff's recommendations. A total of 57 compliance audits have been completed since the inception of the program in 1989, resulting in a total of \$2,386,000 in refunds.

CUSTOMER ASSISTANCE

The consumer affairs office handles inquiries and complaints from the general public and provides individual, direct assistance to consumers who have been unable to resolve their complaint with a regulated utility. The staff attempt to resolve disputes informally as an arbitrator between the utility and the complainant. Electric and Telephone Division staff are consulted for technical assistance when necessary. In a case which cannot be resolved to the complainant's satisfaction, the complaint is forwarded to the office of the general counsel for further review and possible action by the agency.

In fiscal year 1993, the office processed more than 8,500 complaints and 71,000 inquiries, an increase of more than six percent from fiscal year 1992. Also, during 1993, the office secured more than \$190,000 in refunds and credits for consumers which is more than a 100 percent increase from fiscal year 1992.

The public information office handles all news media information requests and provides print and electronic media interviews. The office also responds to general inquiries about agency activities, serving as a liaison between the public and the specialists within the commission, and coordinates regional public hearings. In addition, the public information office produces press releases and a variety of publications, including a daily clipping service, a weekly set of reports on docketed case activities that is available by subscription, the agency's annual report, and information brochures on utility regulation and topics of consumer interest.

ADMINISTRATION

Administrative support activities of the agency are performed by the executive director, the internal auditor, the fiscal and purchasing section, personnel, the library, and information systems and services. The executive director manages the agency's day-to-day operations and advises the commission on management issues. The executive director is hired by and reports to the three commissioners. In addition to managing the agency, the executive director coordinates special projects and programs such as agency-wide budgeting and strategic planning. The agency completed its second strategic plan in June 1994 and submitted it to the Governor, Lieutenant Governor, Speaker of the House of Representatives and several legislative oversight agencies including the Sunset Advisory Commission.

The internal auditor is responsible for conducting independent reviews and evaluations of agency activities and furnishing the agency staff and the commission with appraisals, recommendations and information on activities reviewed. PUC is subject to the state's Internal Audit Act and the agency's internal audit function complies with the requirements in the act.

The fiscal and purchasing section's responsibilities include preparing and coordinating the budget, maintaining the agency's accounting system, preparing the annual financial reports, and preparing the biennial legislative appropriations requests. In addition, the fiscal and purchasing section is responsible for payroll processing, payment of goods and services, travel activities, leasing, and purchasing activities.

The personnel office handles staff recruiting for the agency, maintains the agency's personnel files and establishes agency-wide personnel procedures. The personnel office also developed and implemented a minority recruitment plan in 1991 which has been very successful in recruiting and retaining minorities.



PUC library maintains a large collection of scientific, technical, legal, and management books and periodicals. Librarians help the agency staff and the general public use the 18,000-volume collection and conduct technical research projects. The library prepares several publications, including directories of electric and telephone utilities in Texas and indices to the PUC Bulletin, which is prepared by the hearings division and contains copies of the commission's major decisions. The library staff also prepares and monitors the agency's records retention plan and activities.

Additional support services include the information

systems and services section, which provides data processing, word processing and printing services in support of the agency's regulatory and administrative activities. This section provides hardware and software support including systems analysis, programming, user training, hardware repair, hardware and software installation, local area network management, and purchasing assistance.

The print shop provides printing and duplicating services, design and layout expertise, mail room services, messenger and delivery services, and recycling services.



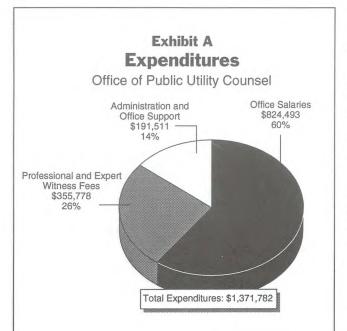
OFFICE OF PUBLIC UTILITY COUNSEL

CREATION AND POWERS

The Office of Public Utility Counsel (OPUC) was created in 1983 as part of the 68th Legislature's Sunset review of the Public Utility Commission of Texas (PUC). The office was established to represent residential and small business consumers after concerns had been raised that these ratepayers, who share similar concerns and interests, were not adequately represented in utility rate cases at PUC. No changes have been made to the office's statute since 1983.

OPUC participates in many types of proceedings at PUC but concentrates its efforts on telephone and electric utility rate cases because these cases have the greatest financial impact on residential and small business consumers. Other office duties include filing comments on PUC's proposed rules and participating in other types of proceedings at PUC, such as hearings on proposed power plant construction.

OPUC also has limited authority to represent residential consumers as a class in rulemaking proceedings at the Texas Railroad Commission and may become a party to other commission proceedings during the appeals process at the request of an affected municipality. The office has been involved in one gas utility rate proceeding and two non-rate proceedings at the Texas Railroad Commission since 1983.



POLICYMAKING STRUCTURE

Unlike most state agencies, OPUC does not have a policymaking board or commission. Instead, the office is overseen by the public utility counsel, who is appointed by the Governor with the advice and consent of the Senate to a two-year term. The Governor may name an acting public counsel between appointments. To qualify for appointment as public counsel, a candidate must be a Texas resident and hold a license to practice law in Texas. The candidate must also show a "strong commitment and involvement in efforts to safeguard the rights of the public" and must possess "the knowledge and experience necessary to practice effectively in utility proceedings." The office has had four public counsels and two acting public counsels since 1983.

The public counsel is the chief executive of the office and hires staff, directs the office's activities, approves the budget, and sets office policy. The public counsel also selects which proceedings the office will intervene in. The deputy public counsel oversees the office in the temporary absence of the public counsel.

FUNDING AND ORGANIZATION

In fiscal year 1993, OPUC's expenditures totaled \$1,371,782, which was slightly less than the office's appropriation of \$1,373,003. Exhibit A shows a breakdown of these expenditures.

Exhibit B shows how OPUC's expenditures have changed during a five-year period. OPUC's expenditures were higher in fiscal year 1990 due to the office's intervention in a rate case involving AT&T as the dominant long-distance carrier in Texas. As provided by law, the office's expenses of \$80,000 in the rate case were reimbursed by AT&T through the general revenue fund. The office also received additional funding of \$250,000 in fiscal years 1990 and continues to receive this appropriation each year, from an access line fee that is paid by local exchange telephone companies to cover part of the costs of regulating these companies.

The office's 1993 revenues to support these expenditures came from two sources. As Exhibit C indicates, the state's general revenue fund provided 82 percent of the revenue used to support the agency's expenditures. The access line fee paid by local exchange telephone companies accounted for the remaining 18 percent of the office's revenue.

As noted above, most of OPUC's funding comes from the state's general revenue fund. Utilities under the Public Utility Commission's jurisdiction pay an annual statutory assessment of one-sixth of one percent on their





gross receipts. This assessment is deposited to the general revenue fund to defray the costs of regulation. Utilities are allowed to recover the assessment from ratepayers through utility rates. The gross receipts assessment generates about \$30 million each fiscal year.

Due to a change in public counsel, the office's staffing and organizational pattern changed in 1994. Currently the office has a full-time staff of 21 employees: the public counsel, a deputy public counsel; six attorneys; five analysts; an information specialist; an office business manager; and six administrative support staff, including four secretaries, one duplicating machine operator and one file retention clerk. Staff assignments vary depending on the office's workload and the type of cases the office is intervening in at the time. All employees work in the Austin office. Exhibit D contains the office's current organization chart.

A breakdown of OPUC's work force is provided in Exhibit E. The chart shows how the makeup of the office's small work force has changed over a five-year period in different employment categories. The chart also compares the office's work force composition with minority work force goals included in the General Appropriations Act. In fiscal year 1993, 30 percent of the office's total work force was made up of minority employees.

The Office of Public Utility Counsel's main purpose is to represent residential consumers and small business consumers in administrative proceedings at PUC, especially in telephone and electric utility rate cases. The office estimated that in 1993 there were approximately 5.9 million small business and residential electric ratepayers and approximately 8.4 million small business and residential telephone consumers in Texas.

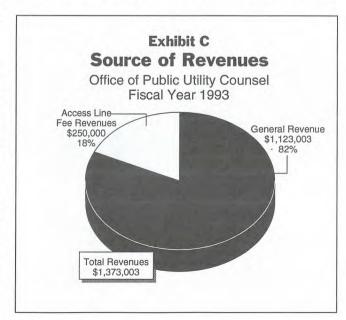
OPUC must carefully choose which cases to intervene in because of its small staff and budget. Since the office was created in 1983, it has intervened in 60 major rate cases, or six percent of all rate cases at PUC. The office has also participated in 554 other proceedings at PUC since 1983, which represents about 11 percent of all the non-rate proceedings at PUC during that time period. OPUC estimates that its sole intervention in specific rate case issues on behalf of residential and small business consumers has saved those ratepayers nearly \$1.4 billion in rate increases from 1983 through 1993. This savings is based on instances where OPUC was the only intervenor to challenge a specific issue in a utility's request for a rate increase. The savings shown is based on OPUC's estimated reduction in the utility's proposed revenue requirement that resulted from OPUC's position ultimately being adopted by PUC or the courts. OPUC also calculates a savings of \$5.7 billion based on instances where OPUC joined with other parties to recommend a position that was finally adopted.

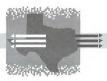
INTERVENTION IN RATE CASES AT THE PUBLIC UTILITY COMMISSION

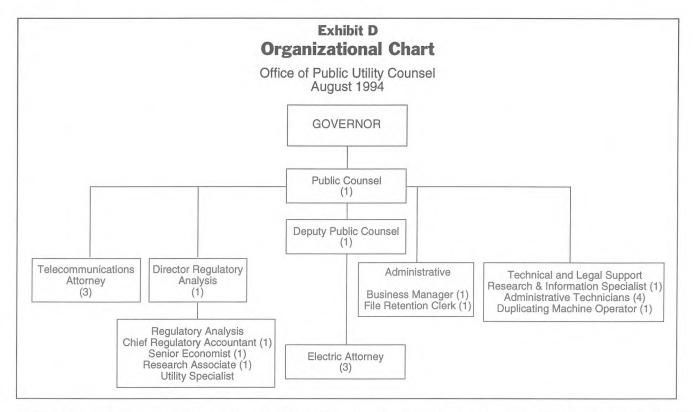
OPUC's participation in rate cases at PUC can be broken down into five phases: reviewing the rate case package, preparing for the administrative hearing, participating in the administrative hearing, taking part in the final order meeting, and appealing the final order to the commission and the courts. Once the office decides to intervene in a rate case, it participates in each phase. The office's activities in a typical rate case are described below and are basically the same for electric and telephone rate cases.

■ Phase 1: Reviewing the Rate Case Package

Rate cases begin in one of two ways. The utility may file a rate change request with PUC, usually for an increase, or PUC may initiate a rate case after inquiring







into the appropriateness of a utility's rates. In either case, the utility must submit a rate filing package that contains specific information about the utility's operations, expenses and revenues, management, existing rate structure and other pertinent data.

Once a rate case has been initiated, OPUC analyzes the rate filing package and examines the issues that will be decided in the case, the number of residential and small business consumers that will be affected, and the potential increase in consumers' utility rates. The public counsel weighs these factors against the office's existing and future workload and decides whether to intervene in the case. If the office intervenes in the case, the staff begins to prepare for the administrative hearing.

■ Phase 2: Preparing for the Administrative Hearing

OPUC's attorneys and analysts work together to prepare for the hearing by analyzing in detail the utility's rate filing package, preparing testimony, requesting additional information from other parties to the case through a legal discovery process, and participating in pre-hearing procedures at PUC. OPUC's staff also responds to requests for information (RFIs) from other parties and takes part in hearings to resolve procedural and discovery disputes between parties. At this point, OPUC will determine if expert witness consultants are needed to testify on issues requiring expertise or specialized knowledge not available through office staff.

At this stage, OPUC's staff prepares written testimony to file with PUC and other parties to the case before the hearing begins. Two key issues that are almost always addressed in OPUC's testimony are the utility's revenue requirement, which is the amount of revenue required to continue operating at a reasonable profit, and the utility's allocation of its costs to consumer classes, which divides the utility's revenue requirement among the various consumer classes. The staff also examines testimony filed by other parties.

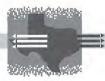
■ Phase 3: Participating in the Hearing

Once the hearing begins, the OPUC attorney, or attorneys, assigned to the case attends the hearing, offers legal objections when considered appropriate, sponsors the office's witnesses, and cross-examines other parties' witnesses. After the hearing is finished, OPUC and other parties in the case prepare briefs that summarize their position on issues and evidence that were raised during the hearing. The briefs are submitted to the hearings officer and other parties in the case. After examining the briefs filed by all the parties, each party then prepares a reply brief that addresses the conclusions drawn in other parties' initial briefs.

Next, the hearings officer issues a report to the PUC commissioners. The report contains findings of fact and conclusions of law, as well as the hearings officer raterelated recommendations for the utility. OPUC files a reply to the officer report with PUC that points out any errors in the report and any objections to the hearings officer findings. After reviewing other parties' replies to the report, OPUC files another reply addressing other parties' objections to the report.

■ Phase 4: Taking Part in the Final Order Meeting

After receiving the hearings officer report and objections and replies from other parties, the Public Utility



Commission holds a final order meeting to set the utility's rate. Usually the commission will hear oral arguments from the parties involved before reaching a decision.

Phase 5: Appealing the Final Order to the Commission and the Courts

After the commission issues a final order, OPUC may file a motion for rehearing by the commission on points that the office intends to appeal in court. The commission decides whether to rehear the contested issues. OPUC must file a new motion for rehearing each time the commission changes the final order if OPUC plans to appeal the modified final order.

Once the commission denies all motions for rehearing, OPUC and any other party to the administrative case may appeal the commission's final order through the courts. The initial appeal is filed in Travis County district court and may continue to the state court of appeals and the state supreme court. Most major utility rate cases are appealed to the courts by one or more parties in the case. The Attorney General's Office represents PUC, and the state as a consumer, in court cases, while OPUC represents itself.

In 1993, OPUC participated in 29 appellate cases. Of these, 12 were at the state district court level, seven were at the state court of appeals, and 10 were at the state supreme court level.

OTHER ADMINISTRATIVE PROCEEDINGS

The office also participates in other types of proceedings at PUC, such as hearings on notices of intent (NOI) and certificates of convenience and necessity (CCN), which utilities must have approved by PUC before building new power generating facilities; hearings to

reconcile a utility's fuel costs with the amount charged to ratepayers for fuel; and hearings on changes to a utility's tariff, which contains the specific rates, terms and conditions a utility must abide by when providing services to customers. A tariff hearing can become a rate case if it is contested by an interested party. The office also comments on proposed rules at PUC and recommends new rules and changes to existing rules. OPUC was actively involved in 44 of these types of proceedings in 1993.

The office is authorized by statute to represent individual consumers in unresolved complaint proceedings before PUC, which rarely happens because of the office's limited resources. However, the office provides advice to complainants on PUC's hearings procedures and assists ratepayers who have problems when requested. The office also reviews complaints filed with PUC as part of the office's preparation for a rate case.

ADMINISTRATIVE SUPPORT

OPUC's business manager oversees the agency's business activities, including accounting, budgeting, contracts, purchasing, payroll, personnel, and property management. Other support staff include an information specialist who follows state and federal legislation and coordinates information with interest groups and handles consumer complaints, and four secretaries who type legal and technical documents and maintain records for all rate cases and court cases. The office also has a file retention clerk and a full-time copying machine operator who copies filed testimony, discovery requests and responses, and other information. The office must provide copies of these and other materials to every intervenor in a regulatory proceeding at PUC.

Exhibit E Percentage of Minorities in Agency's Work Force

Office of Public Utility Counsel

Job Category	1989 Total Work Force 11		1993 Total Work Force 20		1994-1995 Appropriations Act Statewide Goal for
	Total Positions	Percent Minority	Total Positions	Percent Minority	Minority Work Force Representation
Administrators	2	0%	2	30%	14%
Professionals	8	12.5%	12	8.33%	18%
Technicians	N/A	N/A	N/A	N/A	23%
Protective Service	N/A	N/A	N/A	N/A	48%
Para-Professionals	N/A	N/A	N/A	N/A	25%
Administrative Support	3	20%	6	66.6%	25%
Skilled Craft	N/A	N/A	N/A	N/A	29%
Service/Maintenance	N/A	N/A	N/A	N/A	52%



APPENDIX III WORKING GROUP PARTICIPANTS

The following individuals, organizations and associations were represented in the interim committee working groups.

American Association of Retired Persons Association of Electric Companies of Texas

AT&T

Browning Ferris Gas Service

Capitol Network Systems

Central and Southwest Corporations

City of Austin

Communication Coalition of Texas

Competitive Energy Options

Consumers Union

Department of Information Resources

Destec Energy

Eastex Tel Coop

EDS

El Paso Electric

Enron

Entergy/Gulf States Utilities

Environmental Defense Fund

Francis Fisher

GTE

GTE Mobile Communications

Houston Industries

Houston Lighting & Power

J. Makowski Associates

Kailashe Engineering

Kenetech

LCRA

LDDS Metromedia Communications

McCaw Communications

MCI

Metropolitan Fiber Systems

Occidental Chemical Corporation

Office of Public Utility Counsel

Poka Lambro Coop

Public Citizen

Public Utility Commission

Senate Research Center

Sol Shapiro

Southern Union Gas

Southwest Telecommunications Association

Southwestern Public Service

Sprint

Sunset Advisory Commission

Susan Hadden

Teleport

Tenaska

Texaltel

Texas A&M University

Texas Association of Broadcasters

Texas Attorney General

Texas Cable T.V. Association

Texas Chemical Council

Texas Citizen Action

Texas Daily Newspaper Association

Texas Department of Commerce

Texas Électric Cooperatives

Texas Industrial Energy Consumers

Texas Municipal League

Texas New Mexico Power Company

Texas Payphone Association

Texas Press Association

Texas Public Power Association

Texas Renewable Energy Industries

Texas Statewide Telephone Cooperatives, Inc.

Texas Tech University

Texas Telephone Association

Time Warner

TU Electric

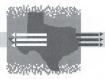
Turning Point Info. Svcs.

U.S. Generating

Union Carbide

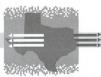
University of Texas

University of Houston



APPENDIX IV SUMMARY OF TELECOMMUNICATIONS REGULATIONS IN OTHER STATES

STATE	ALTERNATIVE REGULATION PLAN	INFRASTRUCTURE INVESTMENT COMMITMENT
CONNECTICUT	1994 In May the Legislature enacted a bill that allows for alternative forms of regulation and competition, and encourages the development of a telecommunications infra-	
Page 73	structure. The goals set forth are to be guidelines for the implementation of the act by the Department of Public Utility Control.	
ILLINOIS	1992 Illinois Legislature passed SB 511 authorizing the commission to adopt incentive regulation methodology. Statute also	There is no infrastructure investment required.
Page 73	allows for two classes of services, competi- tive and non competitive and creates a uni- versal assistance program.	
INDIANA	Indiana Bell Telephone Company and the Utility Regulatory Commission agreed on an alternative plan that creates three categories of services: basic local (BLS), BLS-related,	The following investments are required with the understanding that the investments are not recoverable through rates and charges for BLS and BLS-related ser-
Page 75	and "other" services. The first two categories have little pricing flexibility but changes in the last group only require an informational tariff to be filed with the Commission.	vices. From 1994-1999: \$5 million per year to either the Corp. for Educational Technology or other non-profit corporation and \$20 million per year to provide digital switching and transport facilities to interested schools, hospitals and major government centers in the Company's service area.
KENTUCKY Page 75	1992 enacted legislation (Kentucky Acts 306) in order to clarify the PUC's authority to adopt an experimental incentive plan. This plan requires any telco interested in an alternative form of regulation to file a petition with the PUC. South Central Bell has been granted an earnings sharing plan and has filed for a price caps plan.	There is no infrastructure investment required.



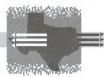
Summary of Telecommunications Regulations in Other States (Continued)

STATE	ALTERNATIVE REGULATION PLAN	INFRASTRUCTURE INVESTMENT COMMITMENT
MARYLAND Page 76	Commission granted MFS-I the authority to provide local exchange service to business customers as a co-carrier and as a reseller of Bell Atlantic's local exchange service in Maryland. Bell is under sharing/rate base/rate of return regulation, with a 2 year freeze on basic local exchange rates and pricing flexibility on competitive services.	No infrastructure investment required.
MICHIGAN Page 77	1991 Michigan Telecommunications Act gave the Public Services Commission the authority to adopt alternative forms of regulation, including significant pricing flexibility for statutorily listed services.	Legislature allowed for educational institutions to build their own networks and require a telco to provide interactive data and video services if no other provider bids for the job. There is also an agreement to allow Ameritech's over-earnings to be contributed to a distance learning project and in turn, Ameritech would match the funds.
MINNESOTA Page 78	In 1987 and then again in 1989, the Minnesota Legislature amended the statutes to allow for alternative forms of regulation and to create competitive classes, or baskets, of services. Participation is voluntary and US West has been only Telco to submit a plan.	The PUC in Minnesota required US West to modernize all 88 rural central offices to digital switches by December, 1994. The total cost of these upgrades will be \$115 million over four years.
MISSISSIPPI Page 78	1994 SB 2514 added two paragraphs enabling the commission to consider proposed plans from telcos and defining "alternative methods of regulation" as methods other than rate base/rate of return regulation. Commission already had the authority to consider alternatives. Bell has 50/50 sharing plan in place now.	No infrastructure investment requirement in the statute or by the commission. The telco was required to submit a report on proposed changes, if any.



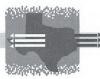
Summary of Telecommunications Regulations in Other States (Continued)

STATE	ALTERNATIVE REGULATION PLAN	INFRASTRUCTURE INVESTMENT COMMITMENT
MISSOURI	Incentive plan for SWBT arising out of a complaint case. The plan ran from 1/90	SWBT agreed to the following:
Page 79	through 1/93, including a one year extension. Local exchange rates were frozen and earning sharing above 14.1% ROE. SWBT has returned to rate base/rate of return regulation although a new agreement with the PSC imposes a four year moratorium on rate cases and complaint cases.	 A network modernization program to replace all of its electromechanical switches and N-Carrier interoffice facilities by 12/31/92. (Completed) Upgrade from multi-party to one-party service and eliminate multi-party service by December 31, 1997. New agreement makes completion date March 1996.
MONTANA	HB 610 grants the Commission the authority to detariff certain services and implement alternative form of regulation. The legislation allows for price caps and earning sharing	No infrastructure investment requirement in the statute.
Page 79	plans for which the telco can petition the commission. According to the PSC, all companies are still regulated under traditional rate base/rate of return regulation.	
NEBRASKA	1986 The legislature deregulated the state telephone industry. The Public Services Commission (PSC) must annually report to	No infrastructure investment requirement in the statute.
Page 80	the legislature regarding the quality of services, availability of diverse services and rates for LEC's and IXC's.	
NEW JERSEY	1992 The Telecommunications Act allows the telcos to request a plan for alternative regulation from the Board of Regulatory Commissioners. There are eight points a plan	Infrastructure investment requirements are company specific.
Page 80	must satisfy and competitive safeguards. The board may not regulate, fix or prescribe rates, tolls, charges, rate structures, terms and conditions of service, rate base, rate of return and cost of service, of competitive services.	



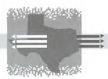
Summary of Telecommunications Regulations in Other States (Continued)

STATE	ALTERNATIVE REGULATION PLAN	A three-year plan for the deployment of the telephone network portion of the E911 service for the US West territory. There was also an agreement to convert the Taos cluster of central offices to digital and to invest \$19.6 million to construct a network to serve the institutions of higher education.		
NEW MEXICO Page 81	Commission implemented an incentive plan because of US West's over-earnings. The plan included pricing flexibility for non-basic services. This plan was temporary and all telcos have now returned to rate base, rate of return regulation.			
NEW YORK Page 81	The PSC and New York Telephone have been discussing incentive-based regulation, but no formal agreement has been made. Rochester Telephone has petitioned for a restructuring with a long-term rate freeze and incentive plan. The hearings on this petition are to begin soon with a decision in December. The statute on regulation is very broad.	No infrastructure investment requirement in the statute.		
OHIO Page 81	1988 legislation passed granting the commission the authority to approve alternative regulation plans proposed by the telcos. The commission took the legislation and produced a set of procedures and rules the companies must follow when proposing a plan.	The rules contain a quid pro quo element wherein the telephone company must commit to specific infrastructure investments and to perform other projects, including assisting schools in evaluating the use of distance learning technologies.		
PENNSYLVANIA Page 82	1993 legislation passed allowing for local competition through alternative forms of regulation. For the electing telephone companies, earnings are no longer regulated.	All telcos filing for an alternative form of regulation must file a network modernization plan. The plan must be updated and filed with the commission biennially.		
TENNESSEE Page 84	The Commission has statutorily granted authority to set rules on the regulation of the telcos in the state. They have devised a plan where each telco has an earning period of three years with a subsequent review at the end.	The PSC released a plan to upgrade the telephone network with ISDN, SS-7 and broad-band technologies. It is a 10 year Master Plan called "FYI Tennessee". This plan is funded through the over-earnings of the telcos in the state.		



Summary of Telecommunications Regulations in Other States (Continued)

STATE	ALTERNATIVE REGULATION PLAN	INFRASTRUCTURE INVESTMENT COMMITMENT There are no requirements set forth in the legislation.	
VERMONT	1993 Legislation adopted to allow alternative forms of regulation. The Public Service Board, the telephone companies, or the Department of Public Service can initiate a		
Page 85	plan for alternative regulation. There are various options available under such regulations, including: incentive regulation, earning sharing, categorization of services for the purpose of pricing, price caps, price index formulas, ranges of authorized returns, detariffing and reduction or suspension of regulatory requirements.		
WASHINGTON	1994 In May the Washington Utilities and Transportation Commission drafted a report recommending "price regulation with signifi-	Infrastructure is not addressed in this recommendation. According to the Washington Commission, they feel infrastructure	
Page 85	cant unbundling of the local exchange net- work." Services would be divided into three baskets, with varying pricing flexibility, depending on the level of competition.	investment requirements are a monopoly concept. They are going to monitor the infrastructure so they can maintain the present level of the network.	
WISCONSIN	1994 In special session in June the legislature enacted telecommunications legislation. This act created the Advanced Telecommunications reputation and opened regulation.	Within 60 days of becoming a price regulated utility, the telco must file a plan with the commission outlining its investment	
Page 87	cations Foundation and opened regulation for telecommunications utilities to include incentive-based regulation. A telecommunications utility may elect to become a price regulated utility by filing a written election with the commission.	commitment to infrastructure improvements in the state over a period of not less than 6 years.	



SUMMARY OF TELECOMMUNICATIONS REGULATIONS IN OTHER STATES

CONNECTICUT

In May of 1994 the Connecticut Legislature enacted a bill that allows for alternative forms of regulation and competition, and encourages the development of a telecommunications infrastructure. The goals set forth are to be guidelines for the implementation of the act by the Department of Public Utility Control and are as follows:

- To ensure universal availability and accessibility of high quality affordable telecommunications services to all residents and businesses in the state;
- To promote the development of effective competition as a means of providing customers with the widest possible choice of services;
- To utilize forms of regulation commensurate with the level of competition in the relevant telecommunications service market;
- To facilitate the efficient development and deployment of an advanced telecommunications infrastructure, including open networks with maximum interoperability and interconnectivity;
- To encourage shared use of existing facilities and cooperative development of new facilities where legally possible, and technically and economically feasible; and
- To ensure that providers of telecommunications services in the state provide high quality customer services and high quality technical service.

Alternative Regulation Plan:

The legislation creates three categories of services: competitive, emerging competitive, and non-competitive services. The Department has the authority to reclassify any service to one of the categories provided the following has been taken into consideration:

- The number, size and geographic distribution of other providers of the service;
- The availability of functionally equivalent services in the relevant geographic area at competitive rates, terms and conditions;
- The financial viability of each company providing a functionally equivalent service in the relevant market;

- The existence of barriers to entry into, or exit from, the relevant market;
- Other indicators of market power which the Department deems relevant, which may include, but are not limited to, market penetration and the extent to which the provider of the service can sustain the price for the service above the cost to the company of providing that service;
- The extent to which other telecommunications companies must rely upon the service to provide their telecommunications services; and
- Other factors that may affect the public interest.

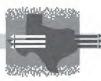
The legislation also allows the Department to consider "and is encouraged to" implement alternative forms of regulation, including, but not limited to, price indexing, price regulation, cost indexing or price benchmarks, for emerging competitive and non-competitive services. Each plan may be filed by the company or developed by the Department, but the plan must be company specific.

ILLINOIS

In 1992, the Illinois Legislature passed SB 511 authorizing the commission to adopt incentive regulation methodology instead of the traditional rate base/rate of return regulation. Consistent with telecommunications legislation passed in other states, this measure states "it is the policy of the state that telecommunications services should be available to all citizens at just, reasonable and affordable rates and that such services should be provided as widely and economically as possible in sufficient variety, quality and reliability to satisfy the public interest."

Alternative Regulation Plan:

The statute lifts the commission's ratemaking jurisdiction over small telcos (25,000 access lines or less) completely, except for the investigation of proposed changes if 5 percent or 75 affected customers file a petition. Each telephone company offering local exchange services must obtain a certificate of exchange service authority, however, the commission must consider the impact on the financial viability of the principle provider in granting such certificates. A company offering interexchange telecommunication service must apply for and receive a certificate of interexchange service authority, with the same considerations by the commission required. The statute also allows for two classes



of services: competitive and non competitive services. The commission has the authority to consider alternative forms of regulation for the non competitive class of services, including, but not limited to, price regulation, earnings sharing, rate moratoria, or a network modernization plan. In accordance with the public policy goals set out in the bill, the commission is to consider the following when determining the appropriateness of an alternative form of regulation:

- · Reduces regulatory delay and costs over time;
- · Encourages innovation in services;
- · Promotes efficiency;
- Facilitates the broad dissemination of technical improvements to all classes of ratepayers;
- Enhances economic development of the state; and
- Provides for fair, just, and reasonable rates.

A petition may be filed by a telecommunications carrier providing non-competitive services for an alternative form of regulation, which is then reviewed by the commission. After notice and hearing, the commission may approve or modify the plan and authorize the implementation of the plan, or modified plan, if it finds that the plan, at a minimum:

- Is in the public interest;
- Will produce fair, just, and reasonable rates for telecommunications services;
- Responds to changes in technology and the structure of the telecommunications industry that are, in fact, occurring;
- Constitutes a more appropriate form of regulation based on the commission's overall consideration of the policy goals set forth in Section 13-103¹ and this section;
- Specifically identifies how ratepayers will benefit from any efficiency gains, cost savings arising out of the regulatory changes, and improvement in productivity due to technological change;
- Will maintain the quality and availability of telecommunications services; and
- Will not unduly or unreasonably prejudice or disadvantage any particular customer class, including telecommunications carriers.

As a condition for commission approval of a plan,

This section is the policy statement made by the General Assembly, where they discuss the need for availability of telecommunications services at just and reasonable rates, public interest goals, regulation implementation without unnecessary disruption of service, and the development of advanced telecommunications networks.

basic residence service rates must be frozen for three years at a rate no higher than the rate in effect 180 days before the filing of the plan. Basic residence service rates are defined as "the telecommunications carrier's lowest priced primary residence network access lines, along with any associated untimed or flat rate local usage charges."

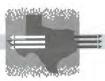
Competitive Services:

A service shall be classified as competitive if, for some identifiable class or group of customers in an exchange, or group of exchanges, the services, its equivalent, or a substitute is available from one or more providers. A tariff filed by a telecommunications carrier that offers both competitive and non competitive services, classifying or reclassifying a service as competitive, must file a study of long run incremental cost of such service and demonstrate that the rates and charges for the services are not less than cost. Proposed rate changes for competitive services shall be effective 14 days after being filed, with prior written notification given to the affected customers. Competitive services may also be offered through customer-specific contracts, but the contract must be filed with the commission within 10 days of the contractual agreement. Answering services, paging services, and cable services used for one-way distribution of entertainment services are excluded from the definition of telecommunications services. The commission has the authority to exclude, by rulemaking, the following services from regulatory oversight:

- Private line service not directly or indirectly used for the origination or termination of switched telecommunication service;
- Cellular radio service;
- High speed point-to-point data transmission; and
- The provision of a telecommunications service by a company to itself between points in the same building or connected buildings.

For those telcos providing both classes of services, there is an imputation test that must be satisfied for services that compete with switched interexchange services, private line services, or information or enhanced services which utilize non competitive service elements. The test is the sum of the following:

- Specifically tariffed premium rates for the non competitive services or elements or its functional equivalent, that are utilized to provide the service;
- The long run service incremental costs of facilities and functionalities that are utilized but not specifically tariffed; and
- Any other identifiable, long-run service incremental cost associated with the provision of the service.
 The statute creates a universal service assistance pro-



gram for residential customers that is funded by contributions from customers of the telephone companies.

Infrastructure Investment Commitment:

There is no infrastructure investment required.

Ameritech Plan

Since adoption of the legislation, Ameritech has filed, and the Commission has now adopted, a price cap plan that freezes rates for residential service and short haul toll for the duration of the plan. The company is required to cut rates by \$93.2 million, as well. The non competitive services, including business exchange service, WATS and payphone calling, are subject to GDP-PI indexing formula, which allows rates to rise according to the GDP-PI minus 4.3 percent productivity factor, but no more than 2 percent in one year. The competitive services are not price capped. There are eight service quality standards that must be met, resulting in a maximum 2 percent add-on to the productivity factor, if the standards are not met.

INDIANA

Alternative Regulation Plan:

This is an agreement between Indiana Bell Telephone Company and the Indiana Utility Regulatory Commission. The agreement creates three categories of services: basic local services (BLS), BLS-related services and other services. Basic local service (BLS) is voice-grade access to the network plus usage within the traditional local calling area, and includes the following charges: basic line charge, zone charge and end-user line charge. The rates for this category can not be increased and can only be decreased if the company provides a long-run service incremental cost study to show that the price exceeds LRSIC plus 1 percent. BLS-related services (BLS-Related) are defined as any service which enhances, supplements, or depends on BLS but does not upgrade the quality of access above voice-grade or extend usage beyond the traditional local calling area. The category includes, but is not limited to, the following services: touchtone, basic custom calling features (i.e. call waiting, call forwarding, speed dial, and three-way calling), directory assistance, operator-assisted local calling (does not include operator services provided as an adjunct to the use of a telephone credit card or the use of a public payphone), linebacker (may be offered in conjunction with other services provided if IBT does not increase the rates and charges or discontinue existing service), call trace (if approved by the Commission), non-published/non-listed numbers, the provision of one free directory, annually, and billing and collection of BLS and BLS-related services. The pricing of these services is handled in the same manner as the BLS services with one exception, the prices for the custom calling features, except for call waiting, may be increased at a rate not to exceed a total of 25 cents per feature during the term of the agreement. Other services (Other) is defined as any service other than BLS or BLS-related services. The existing services include: Centrex, Dedicated Communications Services, toll, 800 WATS, operator services and directory services (except for the provision of one free directory, annually). The rates for the other services category (except for IntraLATA toll basic schedule for residence toll service, public telephone services and carrier access) can be increased or decreased at the will of the company provided the company submits a tariff to the commission and sends informational notice to the affected customers. The price must exceed the LRSIC plus 1 percent standard, as well.

Infrastructure Investment Commitment:

IBT is required to make the following investments with the understanding that the value of the investments is not recoverable through rates and charges for BLS and BLS-related services.

- \$5 million per year for each year 1994 through 1999
 to either the Corporation for Educational Technology
 or other similar non-profit corporation at IBT's sole
 discretion to fund information processing and
 telecommunications equipment, including, but not
 limited to terminal equipment, hardware, applications software and training to permit eligible elementary and secondary schools in Indiana Bell's service
 area to take advantage of broadband and digital technology for voice, data, video and other applications.
- \$20 million per year for each year 1994 through 1999
 to provide digital switching and transport facilities
 including, where appropriate, fiber optic facilities, to
 every interested school, hospital and major government center in the company's service area on a non
 discriminatory basis. IBT agrees to provide proof of
 compliance with this provision on an annual basis to
 the settling parties, if requested.

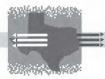
KENTUCKY

Kentucky enacted legislation in 1992 (Kentucky Acts 306) in order to clarify the Public Utility Commission's authority to adopt an experimental incentive plan with South Central Bell. This plan requires any telco interested in an alternative form of regulation to file a petition with the PUC.

Alternative Regulation Plan:

The Commission has the authority, after notice and opportunity for comment, and hearing if requested, to exempt services or products from regulation. The Commission may adopt alternative requirements for establishing rates and charges for any service if it finds that it is in the public interest. The commission is required to consider the following when determining exempt services:

- The extent to which competing telecommunications services are available from competitive providers in the relevant market;
- The existing ability and willingness of competitive providers to make functionally equivalent or substitute services readily available;



- The number and size of competitive providers of service;
- The overall impact of the proposed regulatory change on the continued availability of existing services at just and reasonable rates;
- The existence of adequate safeguards to assure that rates for services regulated pursuant to the chapter do not subsidize exempted services;
- The impact of the proposed regulatory change upon efforts to promote universal availability of basic telecommunications services at affordable rates and upon the need of telecommunications companies subject to the jurisdiction of the commission to respond to competition;
- Whether the exercise of commission jurisdiction inhibits a regulated utility from competing with unregulated providers of functionally similar telecommunications services or products;
- The overall impact on customers of a proposed change to streamline regulatory treatment of small or nonprofit carriers; and
- Any other factors the commission may determine are in the public interest.

The investment, revenues, and expenses associated with those services deemed competitive, and then become exempt, shall not be taken into consideration in the setting of rates for the telco's regulated services. Under the new laws, an earning sharing agreement has been granted to South Central Bell, which has resulted in rate rebates for the customers. There is also a rate case pending in which Bell has petitioned for a price caps plan.

Infrastructure Investment Commitment:

There are no requirements in the new law for infrastructure investment and the commission has not required any investment in any alternative regulation plan either.

MARYLAND

Maryland has taken steps toward opening the market for competition by granting MFS Intelenet's (MFS-I) application to provide local exchange services to businesses, small and large, in Maryland. MFS submitted a plan to offer the following services:

- End User Access Services, consisting of dial tone lines, PBX trunks, and Centrex-like access lines, to business customers at various points in the specified service territory;
- Local exchange and long distance calling services (including operator services) to customers of MFS-I's End User Access Services, as well as long-distance

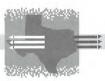
- calling services to customers of Bell Atlantic by means of pre-subscription;
- Originating and terminating carrier access services which will permit other carriers to offer services or to complete calls to customers of MFS-I End User Access Services; and
- Over time, any other local exchange or interexchange services for which MFS-I's management deems there exists sufficient customer demand.

In order for MFS-I to be able to provide these services they had to request the following from the Commission:

- Authority to provide intrastate interexchange services;
- Authority to provide local exchange services;
- Waiver of certain provisions of the Code of Maryland Regulations;
- Waiver of 30-day tariff notice requirement; and
- The Commission's adoption of interconnection policies, both operational and financial, which provide for:
 - elimination of restrictions on use and resale of BA-Md. services;
 - expanded interconnection to all functions of the local exchange network;
 - ensuring competitors' equal access to numbering resources; and
 - the requirement of reciprocal inter-carrier call terminations and access charge arrangements.

MFS-I was granted the authority to provide local exchange service to business customers as a co-carrier and as a reseller of Bell Atlantic's local exchange service in Maryland, targeting non-residential customers having 5 to 100 telephone lines, but offering services on a non-discriminatory basis to all non-residential customers. As a reseller of Bell Atlantic's services, MFS-I would be like a Shared Tenant Services provider with one distinct difference—MFS-I's customer would not be in a single geographic location. They are calling this "expanded STS". Bell was directed to file revised STS tariffs so that MFS-I could start operations immediately. The issue of unbundling lines and local exchange ports was addressed in the order, but the decision was deferred until "Phase II", in order to study the issue. As a co-carrier, MFS-I was granted their request for tandem and, where justified by the volume of traffic, central office interconnection, thereby directing Bell to offer interconnection and expanded interconnection, when established for interexchange access. Bell was also directed to file revised intrastate access tariffs that reflect charges for local exchange interconnection based

¹Information on Phase II has been requested, but not received.



on 6.1 cents per call. MFS-I will also file tariffs that reflect these charges. However, these tariffs will not be decided on until Phase II. This was accepted on a temporary basis and is subject to further consideration in Phase II. In addressing number portability, the commission decided that as a short-term fix, MFS-I will subscribe to Bell's Flex-DID trunks for the receipt of incoming calls to numbers that its customers desired to retain and any telephone number that a customer desired to switch to MFS-I could be designated as a DID number. In this solution, MFS-I would utilize the existing Flex-DID and PBX tariffs. The Commission stated that a long-term solution was likely to be found on the national level, therefore they are reluctant to try to solve the problem themselves.

Bell Atlantic is currently under sharing/rate base/rate of return regulation. This plan includes a rate freeze for two years on basic local exchange services, with a rate case every two years for adjustments. They have a competitive class of services that are under pricing flexibility with 14 day notice to the Commission. The Commission, however, does not have the authority to allow a price caps plan, which is what Bell Atlantic wants. Since SWB has filed a petition to provide local exchange service, there are plans, by the telcos, of legislation in January 1995 to allow the commission the authority to grant alternative forms of regulation.

MICHIGAN

The Michigan Telecommunications Act of 1991 gave the Public Services Commission the ability to adopt alternative forms of regulation, including significant pricing flexibility for certain statutorily listed services. This Act also requires the Michigan PSC to submit a report to the Legislature and the Governor on the level of telecommunications subscriber connection within each exchange, Commission decisions and actions involving telecommunications issues, the status of the industry (i.e. market-share concentration, compliance, etc.) and a method for determining long run incremental cost pricing for components of the local exchange network and access services.

Alternative Regulation Plan:

Within the new law, the services provided by the telcos have been broken up into three groups: regulated,
regulated with some pricing flexibility and non-regulated. The Legislature passed a price cap plan where basic
local (regulated services) rates are capped for two years.
After the two year period, the rates may be increased by
the annual change in the Consumer Price Index less 1
percent, but only once within a 12-month period. The
regulated services are the basic local exchange services
defined in the Act as "the provision of an access line
and usage within a local calling area for the transmission of high-quality, two-way, interactive switched
voice or data communication." The customers have a

choice of rate structure within the basic local exchange plan, which includes:

- A flat rate for outgoing calls up to 400 calls per month. Calls in excess of 400 per month may be charged an incremental rate set by the provider, subject to notice to the Commission and customers and the CPI minus 1 percent. Exceptions to this incremental rate are as follows:
 - Persons who are 60 or more years old
 - Handicapped persons
 - Non-profit organizations
- A rate determined by the time duration of service usage or the distance between the points of service origination and termination;
- A rate determined by the number of times the service is used; and
- A rate that includes one or more of the rates allowed by this section.

Under the new law, a provider of basic local exchange or toll service, or both, may not discontinue service in a particular exchange unless there is at least one or more other providers also providing service in that exchange. A provider is prohibited from discontinuing regulated services for failure by a customer to pay a rate or charge for unregulated services. A provider of basic local exchange is also required to provide services for the hearing impaired and Lifeline services for low income customers who qualify.

The second group of services which are regulated but have pricing flexibility, are as follows:

- Access Service rates are set by the provider, but shall
 not exceed the rates allowed for the same interstate
 services by the federal government, unless the Commission approves. A provider of basic local exchange
 and toll service, which is not required under this
 statute, must impute to itself the prices of special
 access and switched access for the use of essential
 facilities it uses in the provision of toll, WATS, or other
 services for which access is a component. This imputation is aggregated on a service by service basis.
- Toll Service rates are also capped.

A provider of unregulated services may file tariffs with the Commission, which is required to retain this information and make it available to the public. These services include:

- Enhanced Services;
- Paging, Cellular, Mobile, and Answering Services
- Video, Cable TV, and Pay-per-view;

²Information requested on these services, but not received.



- Shared tenant;
- Private Networks;
- · Financial Services Networks;
- · Radio and Television;
- WATS;
- Personal Communication Networks;
- Municipally-owned Telecommunication Systems;
- 800 Prefix Services; and
- · Reselling of Telecommunications Service.

Infrastructure Investment Commitment:

The only requirement for infrastructure that was mandated by the Legislature is that educational institutions can build their own networks and require a telco to provide interactive data and video services if no other provider bids for the job. There was also an agreement reached at the PSC to allow Ameritech's over-earnings to be contributed to a fund created for a distance learning project and in turn, Ameritech would match the funds. There is currently \$26 million in the fund—\$13 million from the ratepayers, in lieu of a refund and the rest from Ameritech.

MINNESOTA

In 1987 and then again in 1989, the Minnesota Legislature amended the statutes to allow for alternative forms of regulation and to create competitive classes, or baskets, of services.

Alternative Regulation Plan:

The legislation allows the telephone companies to participate in alternative regulation plans on a voluntary basis and so far, US West has been the only company to submit a plan. The plan is an incentive plan with earnings sharing. The agreement was originally for four years but was extended another year, through August 1995. There are no provisions for rate increases or decreases other than those provided by statute. With the exception of certain rate restructuring, basic local exchange service, touch tone, and custom calling rates have remained unchanged since 1989. The sharing plan is as follows:

Up to 13.5% ROE 100% to the Company 50% Customer, 50% Company Above 18.5% ROE 100% to the Customer

Competitive Services:

The state created a basket-type plan with three categories of services: non competitive, emerging competitive and effectively competitive. There have not been any services moved into the effectively competitive category

as of yet. There are only non competitive services and emerging competitive services. Several telephone companies, other than US West, have taken advantage of the competitive class provision. This provision is a streamlining rate change provision, meaning telcos are still subject to traditional rate base, rate of return regulation. The emerging competitive services include the following:

- · Apartment door answering services;
- Automatic call distribution;
- Billing and collection services;
- Call waiting, call forwarding, and three-way calling for businesses with more than three lines;
- Central office-based pricing packages providing switched business access lines which substitute for PBX systems which may or may not share intelligence with the CPE (Customer Premises Equipment);
- Command link-type services for network reconfiguring to rearrange cross-connections between channel services;
- Custom network services and special assemblies;
- Digicom switchnet services for full duplex, synchronous, information transport;
- Direct customer access services for telephone number information;
- Teleconferencing services;
- InterLATA and IntraLATA message toll service;
- InterLATA and IntraLATA private line services;
- InterLATA and IntraLATA wide area telephone service;
- · Mobile radio services;
- Operator services, excluding local operator services;
- Public play phone services, excluding charges for access to the central office;
- Special construction of facilities;
- Systems for automatic dialing; and
- Versanet-type service access line involving continuous monitoring and transmission of data from customer's premises to the central office (Enhanced Private Line).

Infrastructure Investment Commitment:

The PUC in Minnesota required US West to modernize all 88 rural central offices to digital switches by December, 1994. According to the PUC, the company is right on schedule with the upgrades. The company is required to file annual progress reports on the upgrades and annual financial reports. The total cost of these upgrades will be \$115 million over four years.

MISSISSIPPI

The Mississippi Public Service Commission (PSC) was granted the authority to consider alternative forms of regulation about eight or nine years ago, according to a representative of the PSC. However, through SB 2514 during the 1994 Regular Session of the Legislature, the commission was granted the authority to consider alternative plans proposed by a utility. The statute basically leaves it up to the commission to come up with rules and policies to address universal service and to determine



competition in the marketplace on services offered by utilities. The only change to this statute was the addition of two paragraphs enabling the commission to consider proposed plans and defining "alternative methods of regulation" as methods other than rate base/rate of return regulation.

Alternative Regulation Plan:

There is one plan already in effect, South Central Bell's plan, that uses a sharing mechanism. This was a three year plan put into effect on a trial basis and has been renewed for another two years, ending in the summer of 1995. The plan is a 50/50 sharing plan in which the company always shares the profits with the customers on a 50/50 basis. Any return on equity above 11.74 percent results in rate decreases and any return on equity below 10.74 percent requires a rate increase. However, the company is still required to share.

Infrastructure Investment Commitment:

There is no infrastructure investment required through this plan. The telco was required to file a projection of the improvements they planned to make in the future, which included upgrading all facilities to digital by 1990. The commission, however, did not require any changes or more investment to the plan that was filed.

MISSOURI

This was an agreement made between Southwestern Bell and the Public Service Commission arising out of a complaint case. The incentive regulation plan began January 1, 1990, and ran through December 31, 1993, including a one-year extension of the original plan. According to a representative of the PSC, the plan has now expired and SWBT has returned to rate base, rate of return regulation although a new agreement recently signed imposes a four year moratorium on rate cases and complaint cases.

Alternative Regulation Plan:

This plan was not a price cap plan as there were no price fluctuations or increases for inflation, productivity offsets or anything of the sort. Local exchange rates were frozen. Under the plan, earnings were shared with the customers if SWBT achieved returns on equity as follows:

100% to the Company
60% Customer,
40% Company
50% Customer,
50% Company
100% to the Customer

SWBT agreed to not propose increases in local exchange service rates, EAS rates, access line service connection charges, OBRA mileage charges, touch tone charges, & access charges. It did not, however, limit the ability of the company to propose rate decreases. "Revenue neutral" changes within the class of intrastate access charges would also be proposed but not for billing and

collection services. However, "revenue neutral" changes could not be accomplished by increasing recurring access rate elements as a result of decreases in nonrecurring access rate elements.

Infrastructure Investment Commitment:

SWBT agreed to the following terms for network modernization:

- To implement a network modernization program by replacing all of its electromechanical switches and N-Carrier interoffice facilities in Missouri by December 31, 1992, (completed);
- To upgrade all customer service from multi-party to one-party service and eliminate its multi-party service offering by December 31, 1997. Pursuant to a subsequent agreement, multi-party service will be upgraded by March of 1996; and
- To file quarterly progress reports on the modernization program.

MONTANA

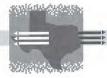
The legislature in Montana granted the Commission the authority to detariff certain services and implement alternative forms of regulation through HB 610. The Statement of Intent is as follows:

A statement of Intent is necessary for this bill because (Section 8) grants the Public Service Commission general rulemaking authority and (Section 6) grants the commission authority to adopt rules relating to the appropriate scope of promotions, rebates, and market trials. The Legislature intends that if rules are adopted by the commission, the rules should permit reasonable flexibility to providers of regulated telecommunications services on the marketing of their services.

Alternative Regulation Plan:

The legislation allows for price cap plans and earning plans for which the telco can petition the commission and file its particular plan. After notice and hearing, the commission may implement the plan if it finds that the plan:

- Will not degrade the quality of or the availability of efficient telecommunications services;
- will produce fair, just, and reasonable rates for telecommunications services;
- will not unduly or unreasonably prejudice or disadvantage a customer class;
- will reduce regulatory delay and costs;
- · is in the public interest;
- will enhance economic development in the state;



- will result in the improvement of the telephone infrastructure in the state; and
- conforms to the purpose stated in 69-3-802 more nearly than regulation under 2, 3, or 9 of this chapter conforms to the stated purpose.⁴

The commission may reject the plan or issue a proposed order modifying the plan, in which case the plan may not be filed until 60 days after issuance, During that time the provider may withdraw its petition or the Consumer Counsel may object to the proposed order. If the petition is withdrawn or the Consumer Counsel objects, the provider remains subject to the same regulation that applied when the petition was filed and may petition to be regulated under a revised plan.

Competitive Services:

Under this statute, the commission may, but is not required to, establish rates, tariffs, or fares for services, as well as:

- totally detariff the service;
- detariff rates for the service but retain tariffs for service standards and requirements;
- Establish only maximum rates, only minimum rates, or permissible price ranges as long as the minimum rate is cost compensatory; or
- provide such other rate or service regulation as will promote the purposes of this part.

Any service, including new services, may be detariffed except noncompetitive local exchange service and carrier access service. Providers of services detariffed are required to maintain a current price list and provide notice of changes in the price list as prescribed by the commission. Prices charged for regulated services must be above "relevant cost", which includes the price for any components that are used by the telecommunications provider and that would be essential for alternative providers to use in providing the competitive services pursuant to commission-approved methodology.

Infrastructure Investment Commitment:

Infrastructure investment was not addressed in the bill. According to a representative of the PSC in Montana, all companies are still regulated under traditional rate base/rate of return regulation.

NEBRASKA

The Nebraska Legislature deregulated the state telephone industry in 1986. The Nebraska Public Services Commission (PSC) must annually report to the legislature regarding the quality of services, availability of diverse services and rates for local (LEC) and interexchange companies (IXC).

The Telecommunications Act of 1986:

- Deregulated LEC rates (other than basic local service) and IXC rates; The PSC has regulation over access charges if the LEC's and IXC's cannot agree on rate levels;
- IXC rates are effective 10 days after the IXC notifies the PSC;
- LECs are required to provide a 60 day customer notice and hold a public informational meeting in order to change basic local rates;
- PSC has the authority to review LEC's basic local rate increases if a certain percentage of the customers protest or if the rates increase by more than 10% in a year;
- PSC has the authority to regulate quality of service and to approve new entrants into the market; and
- PSC has no jurisdiction over cellular, radio, digital, microwave, satellite, and optical fiber services.

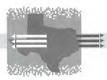
NRRI Conclusion says the LECs receive revenue from basic local exchange, access and toll services, with the rates remaining basically the same since deregulation. However, interLATA and intraLATA toll rates, after deregulation, have increased, as well as customer complaints.

NEW JERSEY

New Jersey passed legislation in 1992, the Telecommunications Act, allowing the telephone companies serving New Jersey to request approval from the New Jersey Board of Regulatory Commissioners for a plan for alternative regulation. There are eight primary points the plan has to satisfy before Board approval, as well as safeguards for the competitive services that have to be met. Under the statute, the board may not regulate, fix or prescribe rates, tolls, charges, rate structures, terms and conditions of service, rate base, rate of return and cost of service, of competitive services. They may, however, require the telco to file tariffs for such services. To date, Bell Atlantic-New Jersey is the only telco to petition for an alternative form of regulation.

Alternative Regulation Plan:

The plan is an incentive-based plan with a key component being a formula-based rate mechanism that uses the Gross National Product Price Index, less a 2 percent productivity offset, for any increases or decreases in rate regulated services. The rate regulated services include protected services and enhancements (call waiting, call forwarding, etc). There is also a return on equity sharing mechanism where earnings are shared with the customers on a 50/50 basis when return on equity is greater than 13.7 percent on rate regulated services. The residential basic exchange service rate has been frozen



at an average of \$7.86, with the highest rate being \$8.19. Rates are determined by geographic location of the customer. The protected telephone services have been frozen until January 1, 1996, with the exception of the residential basic exchange service, which was frozen for the life of the plan (through 1999). The protected telephone services include:

- · Residential and business basic service;
- Touch-tone service;
- Access service not already deemed competitive;
- · Toll service; and
- Ordering, installment, and restoration of the above mentioned services.

Infrastructure Investment Commitment:

Bell Atlantic-New Jersey's plan came with a network deployment plan as well, that entails the deployment of fiber optic and digital facilities throughout the state and bringing interactive Broadband capabilities to New Jersey by the year 2010. Part of the Opportunity NJ plan was a commitment by Bell Atlantic-New Jersey to complete these upgrades by the specified date. According to a report submitted to the Governor by the New Jersey Board, Bell Atlantic-New Jersey is required to report annually to the Board on the progress of the modernization and is meeting its investment target with a one year lag time because of the starting date of Opportunity NJ.

NEW MEXICO

The New Mexico Constitution grants the State Corporation Commission the authority to fix and determine telephone company rates and to determine matters of public convenience and necessity as they relate to rates and charges of telephone companies. The alternative form of regulation plan was implemented because of a Commission inquiry into the alternatives to traditional rate base, rate of return regulation in order to reduce the over-earning that had occurred with US West. US West then filed a proposed Rate Stability Plan and tariff. That plan, however, was dismissed and the "social contract concept" was considered. They ended up with an incentive plan that included pricing flexibility for non-basic services. This plan was temporary and all telephone companies have now returned to rate base, rate of return regulation because of the low rate of return earned through the alternative plan.

Alternative Regulation Plan:

The agreement, effective December 1, 1988, was to reduce authorized return on equity from 14.25 percent to 13.75 percent with a revenue sharing plan of 55-45 where the customers receive 55 percent of the profits and the company retains 45 percent. If the company were to earn more than 20 percent, however, all profits would be distributed to the customers. The services were divided into two groups, basic and non-basic, where the non-basic services were tariffed with pricing flexibility within a range of 20 percent above and 20 percent below the floor. The company was not allowed,

however, to decrease its rates below the long run incremental cost for providing the service, together with the reasonable allocation of common cost. There was an annual rate reduction in the basic services group (switched access services) in the amount of \$3,397,206 to be implemented as shown in the table on page 82.

Infrastructure Investment Commitment:

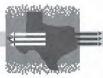
The commitment involved a three-year plan for the deployment of the telephone network portion of the E911 service for all of the US West territory, with an estimated annual revenue effect of \$2,664,794. There was also an agreement to accelerate the conversion of the Taos cluster of central offices to digital in 1990 instead of the original scheduled date of 1993. US West agreed to invest \$19.6 million during the life of the plan to design and construct a state-of-the-art communications network to serve the institutions of higher education in its service area. They were also ordered to file annual reports with the Commission showing the status of the facilities upgrade program.

NEW YORK

New York's regulatory structure is very broad with respect to the statutes. The Public Service Commission has a broad discretion for regulation and, up to the last four years, regulated under a monopoly structure. Since 1990, the PSC and New York Telephone have been discussing an incentive-based model for regulation in order to open up the market for competition. This process was stalled in 1990 because of some ethics problems with NYT. In 1992, the problems had been taken care of so the discussions resumed. This began the "transition" from a monopoly structure to the incentive structure. In the case of NYT, there has been no formal agreement made. Rochester Telephone, however, has petitioned for a restructuring with a long-term rate freeze and incentive plan. The hearings on this petition are to begin soon and a decision is expected in December. The statutes have not been changed in a very long time and need not be changed for the Commission to consider any alternative forms of regulation. They may, in the future, if these plans being considered do actually stimulate the market, make some statutory changes.

OHIO

The Ohio General Assembly passed legislation in 1988 granting the commission the authority to approve alternative regulation plans proposed by the telephone companies in the state. The commission took the legislation and produced a set of procedures and rules the companies must follow when proposing a plan. Interested parties are allowed to participate in the proceedings, as well.



Category	Previous Rate	Approved Rate	Amount Change	Percent Change	Revenue Impact
Dial Tone Line					
Per Month					
Residence	\$7.72	\$7.30	-\$0.42	-5.4%	\$ 1,905,356
Business	\$18.82	\$18.12	-\$0.80	-4.2%	\$ 976,988
Non-Recurring					
Residence	\$50.00	\$47.50	\$2.50	-5.0%	\$ 333,877
Business	\$70.00	\$63.00	\$7.00	-10.0%	\$ 180,985

Alternative Regulation Plan:

The commission has the authority to choose the type of alternative regulation at their discretion, with the consent of the telephone company, though it is expected that the telco file its own plan. Any modifications to the plan ordered by the Commission must be approved by the company. The plans must ultimately be found to be in the public interest and must consider the policies specified by the legislature, namely, to:

- Ensure the availability of adequate basic local service;
- · Maintain just and reasonable rates;
- Encourage innovation in the telecommunications industry;
- Promote diversity and options in the supply of public telecommunications services and equipment throughout the state; and
- Recognize the continuing emergence of a competitive telecommunications environment through flexible services where appropriate.

Competitive Services:

The commission may exempt any non-basic service from regulation if the following conditions are met:

- It is in the public interest;
- The telephone company or companies are subject to competition with respect to such public telecommunications service; and
- The customers of such public telecommunications service have reasonably available alternatives.

In determining if the conditions have been met, the commission must look at the number and size of alternative providers, the availability of services from alternative providers, the availability of functionally equal or substitute services, growth of market share, ease of entry, and the affiliation of providers of service. Basic local exchange service is defined as the end user and carrier access to and usage of telephone company-provided facilities that enabled customers, over a local exchange telephone company network operated within a local service area, to originate or receive voice grade, data or image communications and to access interex-

change or other networks. The local exchange service may not be exempt, but can have an alternative form of regulation applied to it.

Infrastructure Investment Commitment:

The alternative regulation rules contain a quid pro quo element wherein the telephone company must commit to specific infrastructure investments and to perform other projects, including assisting schools in evaluating the use of distance learning technologies. In turn, companies are afforded greater pricing and/or earning flexibility.

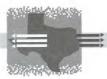
PENNSYLVANIA

In 1993, the Pennsylvania General Assembly enacted a law allowing for local competition of telecommunications companies through alternative forms of regulation. For the electing telephone companies, earnings are no longer regulated.

Alternative Regulation Plan:

A petition by the telco and a network modernization implementation plan is required for an alternative form of regulation. The petition is supposed to include the proposal and supporting data for an alternative form of regulation as well as identify all competitive services the local exchange company proposes at the time. If a local exchange company has not filed for an alternative form of regulation within five years of the effective date of the bill, the company is required to show cause why it has not done so. The commission is required by the statute to, after hearing and notice, approve the plan, approve the plan with modifications, or deny the plan. If the commission denies or modifies a plan, it is required to give specific reasons, in its order, for each denial or modification. The commission must find that a plan meets the following criteria:

• Ensures the continued affordability of protected telephone service. Protected telephone services include the following: telecommunications service provided to business or residential consumers that is necessary for completing a local exchange call, touch-tone service, switched-access service, special access services (i.e. service provided over dedicated, non-switched facilities by local exchange telecommunications companies to interexchange carriers or other large volume users which provide connection between an



interexchange carrier or private network and a customer's premises), ordering, installation, restoration and disconnection of these services;

- Assures that the rates for noncompetitive services are just, reasonable and not unduly discriminatory through the use of a price stability mechanism or other alternative form which may include indices, formulas, rate stability plans, zones of rate freedom or streamlined ratemaking plans. Subject to commission approval, a price stability mechanism that allows total annual revenues from noncompetitive services to increase or decrease from the previous year's total revenues from noncompetitive services as a result of tariff rate changes based on the annual change in the Gross Domestic Price index, as calculated by the United States Department of Commerce, minus 2.25 percent may meet the requirements of this section. Tariffs to recover the additional revenues shall be subject to commission approval under section 1308 (relating to voluntary changes in rates);
- Provides for the rate deregulation of all competitive services, including the deregulation of rates, tolls, charges, rate structures, rate base, rate of return or earnings of competitive services. Notwithstanding the classification of a local exchange telecommunications service as competitive, a local exchange telecommunications company may not de-average standard message toll service rates unless authorized to do so by the commission;
- Will not unduly or unreasonably prejudice or disadvantage a customer class or providers of competitive services;
- · Is in the public interest;
- Enhances economic development in the Commonwealth while maintaining affordable rates;
- Contains a comprehensive program of service quality standards in accordance with section 1501 (relating to character of service and facilities), including procedures for commission review;
- Specifically identifies the benefits to be derived from the alternative form of regulation, including, but not limited to, the reduction of regulatory delays and costs;
- Complies with section 3007 (relating to determination of access charges) under this chapter;
- Will permit the deployment of new voice, data and video services to rural, suburban and urban areas throughout the local exchange telecommunications company service territory;
- Considers the adequacy of local calling areas in view of relevant local communities of interest;
- Assures that low-income individuals are able to con-

nect to and maintain in-home access to protected telephone services. The residential budget usage option service offered by the local exchange company on the effective date of this chapter shall not be eliminated;

- Assures that the provision of telecommunications products and services enhance the quality of life of people with disabilities;
- Ensures that the economic risks associated with the provision of a competitive service by a local exchange telecommunications company or its affiliates shall not be borne by those customers who do not purchase such services; and
- Assures that a local exchange telecommunications company shall provide aggregate customer and network information on a nondiscriminatory basis to any other provider, unless prohibited by law.

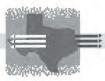
The local exchange companies serving 250,000 access lines in the state, upon the effective date of the bill, are required to have an effective per-minute switched-access service price that shall not exceed 12 cents for the first year of the plan, unless the company can justify a higher rate based on the total cost of switched-access service. The companies having a higher rate than 12 cents per-minute access service charge, on the date the plan is implemented, must provide a revenue-neutral phase-down to not more than 12 cents in not more than three equal annual increments. For the local exchange companies serving less than 50,000 access lines, there is a streamlined form of regulation that can be applied. The company is responsible for filing a petition with the commission that may include, but is not limited to, an index formula, price stability plan, zone of rate freedom or a combination thereof. A streamlined plan may be approved after the commission reaches the following conclusions:

- The proposal reduces regulatory delays and costs;
- The proposal is consistent with general due process requirements;
- The proposal is consistent and in compliance with all of the provisions of the statute; and
- The proposal is in the public interest.

Competitive Services:

The commission determines if a service is to be classified as competitive, through notice and hearing. The telcos may petition, either with the petition for an alternative form of regulation or after the petition has been granted, for a service to be deemed competitive. When determining if a service is competitive, the commission is to consider the following:

 The evidence of ease of market entry, including the existence and impact of cross subsidization, rights-ofway, pole attachments and unavoided costs;



- Presence and viability of other competitors, including market shares;
- The ability of competitors to offer those services or activities at competitive prices, terms and conditions;
- The availability of like or substitute services or other activities in the relevant geographic area;
- · The effect, if any, on protected services;
- The overall impact of the proposed regulatory changes on the continued availability of existing services;
- Whether the consumers of the service would receive an identifiable benefit from the provision of the service or other activity on a competitive basis; and
- The degree of regulation necessary to prevent abuses or discrimination in the provision of the service or other activity and any other relevant factors which are in the public interest.

This criteria applies to new services offered by telcos and the burden of proof lies with the company, as well. The company is required to unbundle basic service functions and make them available under the terms and conditions, including pricing, that is used by the telco. The prices for the competitive services can not be lower than the prices charged for any basic service function, and the revenues from access rates reflected in the price of the competitive service must be included in the total revenues produced by the noncompetitive services.

Interexchange Telecommunications Carriers:

The commissions will have no regulatory jurisdiction over interexchange carriers, but the carriers are required to file and maintain tariffs or price lists for competitive services. All services provided shall be considered competitive effective January 1, 1994, except for the following services, unless the commission deems them competitive:

- Interexchange service to aggregator telephones; and
- Optional calling plan (discounted toll plan) required by the commission to be offered when justified by usage over an interexchange route.

Infrastructure Investment Commitment:

All telcos filing for an alternative form of regulation must file a network modernization plan. The plan must be updated and filed with the commission biennially and must contain the following:

 A commitment to universal broadband availability and converting 100 percent of its interoffice and distribution telecommunications network to broadband capability by December 31, 2015. The plan shall identify the local exchange telecommunications company's present and projected deployment of digital switches in central offices, fiber optic trunk line capability between central offices, intelligent network signaling capability and integrated services digital network availability in central offices;

- Interim target dates at not more than five-year intervals for the deployment of its broadband network; and
- Joint ventures between the exchange companies and other entities may be included.

Two years after the effective date of the bill, the commission is required to submit a report to the Governor and the legislature that evaluates the forms of regulation approved by the commission, the progress of the network modernization plans and the success of the deregulation of the competitive services.

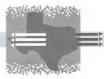
TENNESSEE

In 1990, the Tennessee Public Service Commission released a plan to upgrade the telephone network with ISDN, SS-7 and broad-band technologies. The Commission has statutorily granted authority to set rules on the regulation of the telcos in the state. Through this rulemaking authority they have devised a plan where each telco has an earning period of three years and subsequent review at the end of the period. Through these reviews, the Commission has found over-earnings which have been dedicated to the 10-year Master Plan to upgrade the network called "FYI Tennessee".

This technology deployment plan starts with the upgrade to digital switching in all central offices in the state. The installation of an overlay digital network that utilizes the SS-7 (high speed protocol called Signaling System 7) to connect every central office and to interface with long distance carriers is in the plan. Also, fiber optic cable and the use of ISDN technology is included and, finally, the upgrade to a broad-band telephone network.

The plan estimates an increase in capital expenditures of 11 percent by the regulated telephone companies of Tennessee. FYI expects the telcos to increase the \$330 million per year approximation for the 1990s by \$38 million, with an estimated total of \$402 million over 10 years. The telco would be allowed to earn a normal return on additional investments and would be allowed increased depreciation expenses for early retirement of old switches.

For the first three years of the master plan, the Commission reports that costs have been below the projections initially made.



VERMONT

The Vermont General Assembly adopted legislation in 1993 to allow alternative forms of regulation.

Alternative Regulation Plan:

The Public Service Board, the telephone companies, or the Department of Public Service can initiate a plan for regulation different than the traditional rate base/rate of return regulation. There are various options available to these entities for such regulation, including, but not limited to, incentive regulation, earnings sharing, categorization of services for the purpose of pricing, price caps, price index formulas, ranges of authorized returns, detariffing and reduction or suspension of regulatory requirements. There are eleven requirements that a plan must meet before the Board may approve a plan. Those requirements include:

- · Promotes the general good of the state;
- is consistent with the state telecommunications purposes established under section 202c of this title;
- is consistent with the state telecommunications plan adopted by the department of public service under section 202d of this title, or there exists good cause to approve alternative forms of regulation notwithstanding this inconsistency;
- is consistent with the public's interests relating to appropriate quality telecommunications services;
- is consistent with the goal of protecting or promoting universal service to residential users of telecommunications;
- provides reasonable incentives for the creation of a modern telecommunications infrastructure and the appropriate implementation of new cost-effective technologies;
- reasonably supports economic development in the effected service territory;
- adequately protects consumer privacy interests;
- supports reasonable competition;
- includes adequate safeguards to insure that charges for noncompetitive services do not subsidize competitive services; and
- is just and reasonable and would not produce unjust discrimination between users of the public switched network in the pricing, quality, or availability of the network functions or services offered.

A petition may be approved, rejected or modified by the Board. If a plan is approved or modified, the alternative form of regulation takes effect 60 days after the issuance of the order. In those 60 days the telco has the option to reject the plan. For the duration of an order, the Board has the authority to investigate the effectiveness of such plan and return the company to its traditional form of regulation or modify the plan.

Infrastructure Investment Commitment:

There are no requirements set forth in the legislation.

NYNEX Plan:

The Board of Vermont has proposed a price-based regulation plan that includes price ceilings for protection of the consumers and a price floor, set at long run incremental cost, for the protection of the competitors. This plan allows the annual revenues to increase based on the GDP-PI minus a productivity factor of 4 percent and exogenous costs. The exogenous factor adjustments are limited to tax and accounting changes that uniquely effect the telephone industry only. It also includes 24 service quality standards, in which the productivity factor would be increased by one-sixth of a percent each month these standards are not met, with a maximum of 2 percent per year. There are several baskets in the plan, each with its own price formula. The first basket is priced subject to the GDP-PI minus productivity factor and includes the following services: residential and business basic exchange service, call trace, caller ID, and residential toll. The second basket includes business toll and is priced based on a cap of twice the GDP-PI index. The third basket only allows for rate reductions, no increases at all, and includes local payphone services and any NYNEX "monopoly bottleneck services", such as carrier access. NYNEX is required to impute the price for the bottleneck services to itself, as well. The last basket is called "discretionary services" and allows the prices to change with varying market conditions without exceeding the annual increase in revenue allowed for the telco. If the revenue exceeds the limit, the telco must reduce rates in basic local exchange and residential toll to bring the revenue back down. Infrastructure investment is also required in this plan, including a minimum investment of \$40 million a year on network improvements and a free access line to every public school and library in the service territory for access to the Internet. Installation of fiber-optic links to every hospital is also required in the infrastructure investment commitment. NYNEX is expected to respond to the plan by December 5, 1994 and if there is agreement, the plan would take effect on January 1, 1995.

WASHINGTON

In May of 1994, the Washington Utilities and Transportation Commission drafted a report recommending "price regulation with significant unbundling of the local exchange network." This shift from earning regulation, which is what US West is currently under, to price regulation is an effort to encourage competition. The Washington Legislature has enacted legislation, the



1985 Regulatory Flexibility Act, that declared the state policy to be:

- Preserve affordable universal telecommunications service;
- Maintain and advance the efficiency and availability of telecommunications service;
- Ensure that customers pay only reasonable charges for telecommunications service;
- Ensure that rate for noncompetitive telecommunications services do not subsidize the competitive ventures of regulated telecommunications companies;
- Promote diversity in the supply of telecommunications services and products in telecommunications markets throughout the state; and
- Permit flexible regulation of competitive telecommunications companies and services.

In 1989, the Legislature granted the Commission the authority to adopt alternative forms of regulation, if the Commission finds that a plan:

- Is in the public interest;
- Is necessary to respond to such changes in technology and in the structure of the intrastate telecommunications industry as are, in fact, occurring;
- Is better suited to achieving the policy goals set forth in RCW 80.36.300 and this section than traditional rate of return, rate base regulation;
- Ensures that ratepayers will benefit from any efficiency gains and costs savings arising out of the regulatory change and will afford ratepayers the opportunity to benefit from improvements in productivity due to technological change;
- Will not result in a degradation of the quality or availability of efficient telecommunications services;
- Will produce fair, just, and reasonable rates for telecommunications services; and
- Will not unduly or unreasonably prejudice or disadvantage any particular customer class.

Alternative Regulation Plan:

Under the plan the Commission is recommending, services would be divided into three baskets, with varying pricing flexibility, depending on the level of competition. These baskets would be non-competitive, emerging competitive, and effectively competitive. The rates for non-competitive services would be adjusted annually based on a price formula consisting of an inflationary index offset by a productivity factor. The rates for the emerging competitive services would have banded rate flexibility once

the basic network functions necessary to provide the service have been unbundled and tariffed; and the rates for effectively competitive services would be price listed. The plan would require prices for all services to cover relevant economic costs developed on an incremental cost basis, using forward-looking costs and based on the least-cost technology. In addition, reductions in the rates for effectively and emerging competitive services cannot be offset by increases in the rates for non-competitive services. Initially, all the services would be considered non-competitive, except the ones already classified as competitive or which are offered under a banded rate. These services include: billing and collection, centrex-type services, and high volume toll, as well as call waiting and call forwarding, which are rate banded. After the monopoly network elements have been unbundled and tariffed, the commission may consider services for reclassification. In determining if a service should be reclassified, the commission shall consider, but is not limited to:

- The number and size of alternative providers of services;
- The extent to which services are available from alternative providers in the relevant market;
- The ability of alternative providers to make functionally equivalent or substitute services readily available at competitive rates, terms, and conditions; and
- Other indicators of market power, which may include market share, growth in market share, ease of entry, and the affiliation of providers of services.

Network Unbundling:

A cost study of all basic network functions that is developed using a basic network functionality, or building blocks approach, and uses consistent data and assumptions is necessary for a sufficient level of unbundling, according to the Commission's report. The framework for the unbundling of the network is as follows:

- Unbundling of the LEC network into its basic network functions;
- Nondiscriminatory interconnection to the basic network functions;
- Economic cost-based pricing of the basic network functions; and
- A complaint resolution framework to expedite unbundling and interconnection complaints.

Infrastructure Investment Commitment:

Infrastructure is not addressed in this recommendation. According to a representative at the Washington Commission, they feel infrastructure investment requirements are really a monopoly concept. They have, however, adopted a minimum of quality of service standards to protect the consumers. Competition should take care of



the infrastructure. All they are going to do is monitor it so they can maintain the present level of the network. The state has 90 percent digital switches, with most of the analogue equipment concentrated in Seattle. US West has filed a draft proposal in response to the commission's report. The proposal was a far cry from what the commission wanted so they are trying to work with US West as much as they can without having a formal proceeding. The actual docket has been split into several parts, though, in order to address certain issues separately, such as: interconnection, number portability and 1+intraLATA presubscriptions.

There was also a Supreme Court ruling in Washington on the existing statute that allowed for open entry in to the local exchange market. Currently, there are five telephone companies competing with US West for local exchange service in the state.

WISCONSIN

The Wisconsin Legislature enacted telecommunications legislation in special session in June 1994. This act created the Advanced Telecommunications Foundation and opened regulation for telecommunications utilities to include incentive-based regulation. According to the legislation, a telecommunications utility may elect to become a price-regulated utility by filing a written election with the Commission. The Commission, through notice and opportunity for hearing, must determine that it is in the public interest to suspend any provision or to approve an alternative regulatory method. The following goals must be identified by the commission before approval of any plan:

- The goals to be achieved, which may include promoting competition, infrastructure deployment, economic development, consumer choice, productivity, efficiency, quality of life, societal goals or universal service:
- The authorized incentive and how the incentive is expected to help achieve the identified goals;
- The measurement to be used to evaluate successful attainment of the identified goals; and
- The extent to which a telecommunications utility has contributed to the Wisconsin Advanced Telecommunications Foundation.

Price Regulation for Local/Business Exchange Services:

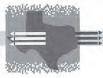
The rates included in this regulation are for basic local exchange services, standard business access lines and usage by small businesses with no more than 3 access lines and basic message telecommunications service and any changes in those rates. The commission may include as part of the services subject to price regulation the following:

- Those services and technological features found by the commission to be a necessary component of universal service.
- Advanced telecommunications services, if the commission finds that the advanced telecommunications service is essential to the public interest; that the advanced telecommunications service, or reasonably equivalent service, is not available at reasonable prices and term and conditions from alternative providers; and that price regulation of the advanced telecommunications service is essential to the public interest.

If a utility elects to become price regulated within 30 days of the effective date of the bill, the utility shall set and file the initial rates with the commission, but the rates may not be greater than those charged as of December 31, 1993. However, in the case of a utility that has more than 500,000 access lines in use in the state, the utility is required to reduce its rates by 10 percent for residential access line service and for single line business access line service. If the utility elects to become a price regulated utility more than 30 days after the effective date of the bill, the utility shall set and file the rates with the commission on at least 45 days notice, with the rates being no higher than those in effect on the December 31 immediately preceding the election. The utilities with 500,000 access lines that elect to be price regulated 30 days after the effective date of the bill must reduce the rates for residential and single line business access lines by 10 percent. The rates filed by the utility for the basic local exchange service are then capped at that rate for three years. After the three-year period, the first permitted increase in the rates for services except basic message telecommunications services may be increased according to the gross domestic price index, less 2 percent, plus or minus any penalty or incentive adjustments. For a utility with 500,000 access lines, the first permitted increase in the rates is limited to the most recent annual change in the gross domestic product price index, less 3 percent, plus or minus any penalty or incentive adjustment, and may not exceed, at any time, 10 percent or the GDP index, whichever is greater. Any rate reductions for any of these services may be filed with the commission with one days notice and any rate structure changes may be filed with 10 days notice to the commission.

Competitive Services:

A telecommunications utility may be authorized by the commission to provide a service under a tariff which specifies a range of rates or a price list for the service. If after 10 days written notice and opportunity for interested persons to comment and if the company has demonstrated that the service which it offers, and which is subject to the jurisdiction of the commission, is subject to competition that may justify a lesser degree of regulation, the commission may authorize the tariff or price list. If authorized, the rate becomes effective after at least 10 days written notice to the effected consumers and must recover the total service long run incremental cost.



Intrastate Access Services:

According to the legislation, the commission may not review or set rates for intrastate access services offered by a price regulated utility. However, the rates for intrastate services, for a telco with more than 150,000 access lines, may not exceed the utility's interstate rates for similar access services. The company is also required to eliminate 50 percent of its intrastate carrier common line charge within one year after becoming a price regulated utility, and eliminate the balance of its intrastate carrier common line charge within one year thereafter. These charges may not be reinstated or substituted. A utility with less than 150,000 lines must adjust its intrastate access service rates in equal annual increments so that, within two years, the intrastate access rates do not exceed the lower of its intrastate access rates in effect as of the date of its election to become price regulated. After three years, the intrastate carrier common line charge may not exceed 83.33 percent of the existing line charge; after four years, the line charge may not exceed 66.67 percent of its existing line charge; and after five years, the charge may not exceed 50 percent of the existing charge.

Infrastructure Investment Commitment:

Within 60 days of becoming a price regulated utility, the telco must file a plan with the commission outlining its investment commitment to infrastructure improvements in the state over a period of not less than six years. The plan must include the following:

- A description of the level of planned investment in technological or infrastructure enhancement;
- A description of the extent to which planned investment will make new telecommunications technology available to customers or expand the availability of current technology;
- A description of the planned deployment of fiberoptic facilities or broad-banned capabilities to schools, libraries, technical colleges, hospitals and colleges and universities in this state;
- Target dates for the deployment of the planned technology and infrastructure improvements;
- For a telecommunications utility with more than 500,000 access lines in use in this state at the time of electing to become price regulated, a level of planned investment in an amount of not less than \$700,000,000 within the first five years of the plan; and
- The level of planned contribution to the Wisconsin Advanced Telecommunications Foundation.

The utility is required to submit an annual report on its investment commitment and improvements. If the report is not filed, if the report does not contain sufficient information on the progress, or if the investment does not adequately provide for the deployment of advanced technologies, the commission may reduce the rates of services subject to price regulation by up to 2 percent.

Wisconsin Advanced

Telecommunications Foundation

The Wisconsin Advanced Telecommunications Foundation was created this year in a special session of the legislature. The purpose of the foundation is to fund advanced telecommunications technology application projects and efforts to educate telecommunications users about advanced telecommunications services. It is considered to be a governmental body where the meetings of the Board of Directors and committees are open to the public. The Governor appoints, with confirmation of the Senate, the majority of the directors. The goal of the foundation, as set in Act 496, is to capitalize the endowment fund with a total of \$25 million received from telecommunications providers and appropriations within seven years after the foundation is organized.

Endowment Fund:

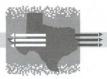
The foundation may fund a project, through the endowment fund, that does any of the following:

- Establishes a clearinghouse that matches potential projects that are consistent with the purposes of the foundation with interested funding sources;
- Demonstrates cooperative applications between telecommunications users and telecommunications providers, if the project is replicable, serves to impart knowledge or skills or meets a demonstrated need and does not compete with the private sector in the deployment of telecommunications infrastructure;
- Promotes the effective use of the telecommunications infrastructure;
- Educates telecommunications users about advanced telecommunications technologies, applications and alternatives and associated effects on privacy; and
- Develops systems or procedures that assist individuals in applying information, produced through application of advanced telecommunications and other information technologies, to create knowledge.

The state and local governments in the state, a public, educational or governmental access facility, an educational institution, or a library or health care information service may apply for funding from the foundation. Telecommunications providers are not eligible.

State Funding Contribution:

The state will contribute \$500,000, from the General Revenue Fund, to the endowment fund, but only after the Joint Committee on Finance determines that the foundation has received direct contributions to the fund from telecommunications providers totaling at least \$1,000,000.



Fast Start Fund:

In addition to the endowment fund, the foundation is to create and administer another fund in which telecommunications providers shall contribute the following:

- A total of \$2 million in direct or in-kind contributions by January 1, 1996.
- A total of \$3 million, of which at least 50 percent must be direct contributions, by January 1, 1997.

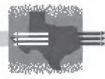
By January 1, 2002, the foundation must attempt to raise additional funds, totaling at least \$10 million in direct or in-kind contributions, from persons other than telecommunications providers. The foundation must also submit a report to the Joint Committee on Finance and the Joint Committee on Information Policy that includes that status of capitalization of the endowment fund and the status of progress in raising contributions from other sources.

Note:

October 11, 1994, conversation with the Wisconsin PSC: The Wisconsin Advanced Telecommunications Foundation is to receive a total of \$25.5 million in con-

tributions from the telecommunications providers but that money is to stay put. The grants given out by the foundation are to come from the interest earned from the \$25.5 million contributed. According to a representative at the PSC, there are high expectations of how much money will be earned, which could be a problem. They are still trying to interpret the legislation and establish guidelines for the administration of these grants, so they are not really sure how everything is going to work yet.

Ameritech has elected to become a price-regulated utility and has submitted an infrastructure investment plan. The original plan was to lay fiber up to the school house door of every secondary school in its service area (they serve about 65 percent of the state, based on population). However, on October 7, 1994, the plan was modified to include all elementary schools as well. The problem with this is that it is left up to the school, after the fiber is laid, as to what to do with it, including pay for the hardware, maintenance, etc. It is intended to have the Foundation grants help with this, but the grant is supposed to be a one time deal, so there are still some things to be ironed out with the grants and the plans that may be proposed by the telcos.



APPENDIX V

NETWORK INFRASTRUCTURE IN TEXAS

(Summary of remarks by Rowland Curry in October 5, 1994 hearing)

I. A MULTI-LAYERED NETWORK

We generally think of the public switched network as being two-dimensional, with the existing architecture of subscriber lines connected from customers to the switch, and of switches that are tied together by trunks. However, another perspective of today's telecommunications network architecture is one that is multi-dimensional, with varying degrees of technological advancement and competitive services in each layer.

The first layer could be described as the interoffice network, where switching offices of the various exchanges and zones are tied together. Much of this layer of networking consists of advanced transmission facilities, predominantly digital, much of which is provided via fiber optic media. This is generally where most competition has historically occurred, with providers including local exchange carriers (LECs), interexchange carriers (IXCs), and other carriers. If a customer in any town in Texas can gain access to this layer of the network, their communication can be transported to a customer in any other town fairly easily, using advanced services such as wideband transmission or high-speed data.

In some locations, a second layer of the network could best be described as specialized facilities, which allow connection of large, high-usage customer locations, generally within a metropolitan exchange. These facilities are often non-switched, or dedicated connections, but may also involve switched circuits. The non-switched facilities may be provided by incumbent LECs or by competitors, and the PUC and FCC are currently attempting to allow competitors to enter the switched circuit market.

The "bottom" layer of the network represents the connection between the switching office and the subscriber location. This layer of feeder and distribution cables is designed to provide service to every household within the exchange or zone. This layer has only limited competition at this time. It is considered to be the "weak link" in the information highway, because of the cost of providing upgraded services to each and every household in the area.

Another important layer or element is required to connect the distribution network to the interoffice transport layer or to specialized switched facilities. An antiquated switching unit cannot provide the features or usable connections that may be required by today's user.

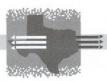
There is a separate layer that must be considered, but it is technically not a part of the switched network: Customer Premises Equipment, or CPE. While it is not a part of the network, CPE plays an important part in the provision of end-to-end services. It is not enough to have an advanced subscriber loop, switching office, and interoffice transport facility if the subscriber does not have anything but a black rotary-dial telephone to connect to it. CPE may represent a significant barrier to the development of an advanced infrastructure, if the customer cannot afford to purchase or lease advanced CPE (e.g., ISDN terminals, video, or computers). These items are not subject to regulation, and for the most part are very competitive.

II. SWITCHING INFRASTRUCTURE

There are generally three types of telecommunications switches in use in the public switched network today: electromechanical, electronic analog, and electronic digital. Electro-mechanical switches represent the oldest vintage, using technology that dates back to the 1920s. Electronic analog switches are generally computer controlled, but still establish an electrical connection through the switch for the transmission of voice or data communications. Electronic digital switches are basically computers used for telecommunications. In a digital switch, all communication is reduced to "ones and zeros", and there is no physical, electrical continuity through the switch for a given call.

Texas has 1,525 "wire centers" which represent the gathering point for the distribution network, and where central switching offices are located. If one were to look at a map of Texas with the areas of coverage by each vintage of switch shown, it would be clear that a great deal of the state is served by digital switching units. Surprisingly, much of the metro areas of Dallas, San Antonio, Houston, and Austin are served by electronic analog switches. Electromechanical switches serve less than two percent of the state's telephone subscribers, although the area served is fairly substantial in some portions of rural Texas.

All of the three primary types of switches are capable of providing adequate "POTS"— plain old telephone service — and most will provide simple features such as tone dialing. However, electromechanical switches will



not provide features such as custom calling or highspeed data transmission. Many analog electronic offices are currently serving the metro areas of Texas, and provide good service, including custom calling features. However, they cannot provide advanced features like ISDN and other switched data; for those features, a digital switch must be used.

III. LIMITATIONS WITHIN AN EXCHANGE

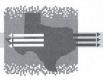
In previous examples, several layers of network architecture have been described. If customers are in an exchange served by fiber optic interoffice facilities and a digital switch, they might reasonably expect to be able to obtain advanced services within that exchange. However, that is not always the case. Distribution facilities within an exchange consist of miles of cable and wire (generally copper) that carry electrical signals from the subscriber's premises to the switching office. Communications signals degrade as they travel over transmission lines, especially twisted-pair copper wires. The farther a signal travels, the weaker it becomes. In addition, higher frequency signals degrade more quickly than low frequency. Therefore, a customer in a remote

corner of an exchange, several miles from the switching office, may have difficulty in receiving or transmitting information, especially high-speed transmission.

With the hub-and-spoke architecture of the current telephone network, this can cause an odd patchwork throughout the state of those customers who have good quality transmission and those who may not. In the future, placement of digital transmission media and fiber optic facilities are expected to make more services, including high-speed digital and wideband analog signals available throughout the exchanges where they are placed.

The presentation at this point focuses on the following charts:

- · Comparison of Technologies;
- Fiber Optic Deployment by RBOCs in Selected States;
- RBOCs' Infrastructure in Selected States;
- Construction Expenditures for Large LECs in Texas;
- Annual Construction Expenditure— Southwestern Bell—Texas; and
- Comparison of Investment by RBOCs.



APPENDIX VI SUGGESTED READINGS

- (1) Texas Telecommunications Strategic Plan. Telecommunications Planning Group, September 1994.
- (2) Staff Analysis of the Incentive Regulation Plan Established in Docket 8585: The First Three Years. Public Utility Commission of Texas, December 1994.
- (3) Scope of Competition in Telecommunications Markets. Public Utility Commission of Texas, January 1995.



APPENDIX VII

ACRONYMS USED

AARP American Association of Retired Persons

AECT Association of Electric Companies of Texas

ATEC Association of Texas Electric Cooperatives

CEO Competitive Energy Options

CU Consumers Union

EDF Environmental Defense Fund

IPP Independent Power Producers

IBEW International Brotherhood of Electric Workers

LCRA Lower Colorado River Authority

OPC Office of Public Utility Counsel

PUC Public Utility Commission

SOAH State Office of Administrative Hearings

TDNA Texas Daily Newspaper Association

TEC Texas Electric Cooperatives

TIEC Texas Industrial Energy Consumers

TML Texas Municipal League

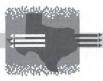
TNP Texas-New Mexico Power

TPA Texas Press Association

TSTCI Texas Statewide Telephone Cooperatives, Inc.

TTA Texas Telephone Association

TTCA Texas Telephone Cooperatives Association



GLOSSARY

Access

The movement of a call to and from a customer location and a long distance

carrier. The major elements of access are "carrier common line," "switching"

and "transport."

Access Charges A charge by a telephone company to a long distance (interexchange) company

for availability and use of its local telephone facilities for origination and ter-

mination of long distance (interexchange) calls.

Access LineThe facilities between a telephone company central office and a customer that

are required to provide access to the local and toll-switched network. The access line currently includes the non-traffic sensitive central office equip-

ment, subscriber loop, and drop line.

ADSL Asymmetrical Digital Subscriber Line. Technology that will allow multiple,

simultaneous high-speed services to be carried over existing twisted pairs, thus dramatically increasing the potential of installed copper networks. Most of the capacity is currently devoted to distribution of video "downstream" to

consumers.

ALJ Administrative Law Judge.

APA Administrative Procedures Act.

ANALOG SWITCH Telephone exchange that switches signals in analog (as opposed to digital)

form.

ADAD Automatic Dial Announcing Device.

AVOIDED COSTThe incremental (marginal) costs to an electric utility of electric energy or

capacity or both, which, but for the purchase from the qualifying facility (QF) or qualifying facilities, such utility would generate the energy itself or pur-

chase it from another source. Substantive Rule 23.66.

Banded rates allow the LEC to price a service within a band defined by both

minimum (or floor) and maximum (or ceiling) rates. The minimum rate level is typically set at the incremental cost of the service, although in most cases the determination of "incremental cost" for this purpose is made by the LEC itself. The maximum rate level is sometimes defined by the existing rate, but may be set at a much higher "market" level. The maximum rate may also be defined annually as a set percentage increase over existing rates. In some cases, regulators will allow only *downward* pricing flexibility, perhaps recognizing the possibility that some "flexibly-priced" services may not always

confront real competition.

BANDWIDTHThe range of electrical frequencies a device or a network channel is able to

handle. For example, a voice channel has a range of 300 to 3,300 Hertz.

BASIC NETWORK FUNCTION (BNF) A discreet network function, which is useful either as a stand-alone function

or in combination with other functions, for which a cost can be identified.

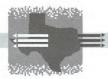
BASE RATEThe portion of a consumer's bill which is attributable to a set level of expenses

plus return on invested capital fixed during rate proceedings.

BLTS Basic Local Telecommunications Service,

Boc Bell Operating Company. A subsidiary of one of the Regional Holding Com-

panies, which provides local telephone service.



BTU

British Thermal Unit.

BROADBAND

Transmission speed of 45 Mbps (45,000,000 bits per second) or greater. A single broadband facility of 45 Mbps can carry 672 voice conversations. Some broadband facilities have transmission speeds in the billions of bits per second. Generally required for video transmission. Fiber optic and coaxial cable can carry broadband communications; the copper wires traditionally used by telephone companies cannot.

CAPs

Competitive Access Providers. Companies providing alternatives to local telephone service, primarily the link from a high-end business customer directly to the switching office of the long distance carrier, thereby bypassing the lines of the local exchange company.

CENTRAL OFFICE

Telephone company facility where subscriber lines are terminated on switching equipment, from which connections can be made to local and long distance points.

CENTREX

A telephone company service using central office switching equipment to route internal calls from one extension to another, to route incoming phone calls directly to the appropriate extension, to handle direct dialing of outbound calls, and to provide many PBX-like service features. Centrex uses a separate dedicated line between each telephone at the customer premises and the switch at the telephone company central office.

CCN

Certificate of Convenience and Necessity.

COA

Certificate of Operating Authority.

COGENERATION

The simultaneous production of two usable forms of energy (usually electricity and steam).

COLLOCATION

A direct connection to a telephone company central office allowing a long distance carrier or "CAP" to provide "transport" services.

CMRS

Commercial Mobile Radio Service.

COMMON COSTS

Costs that cannot be attributed to a specific service and are incurred in the provision of two or more services that would not change appreciably with

COMMON CARRIER

A company that is recognized by an appropriate regulatory agency as providing communications service to the general public.

COMPETITIVE ACCESS PROVIDER (CAP)

A firm providing transport of calls from customers to long distance carrier points of presence (POPs), typically using a fiber optic ring.

CROSS-SUBSIDIZATION

Using revenues generated by one (often regulated) business to support below-cost pricing of another (often unregulated) business.

CUSTOM CALLING SERVICES

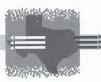
Special services for telephone customers, e.g., three-way calling, call forwarding, and call waiting.

CUSTOMER PREMISES EQUIPMENT(CPE)

All telecommunications terminal equipment located on the customer premise, except coin-operated telephones, and encompassing everything from telephones to advanced data terminals and PBX's.

DIGITAL SWITCH

Electronic switching in central or toll offices that switches voice conversations and other messages that have been converted into digital signal form before entering the switch.



DISTANCE LEARNING

Instruction in which the pupil and instructor are in different locations and interact through the use of computer and communications technology.

ERCOT

Electric Reliability Council of Texas.

EQUAL ACCESS

Provision of local exchange access service in equal kind, quality and price to all long distance companies. The ability of customers to instruct their local telephone company to automatically deliver long distance calls to the carrier of their choice is commonly referred to as equal

EWG

Exempt Wholesale Generator.

EXTERNALITIES

Consequences of a purchasing decision that are not considered by the buyer or seller. Negative externalities include environmental pollution that creates costs or disadvantages for people not party to the economic transaction. Positive externalities include general economic benefits resulting from services beyond those reflected in the providers' revenue.

FCC

Federal Communications Commission.

FERC

Federal Energy Regulatory Commission.

FIBER OPTIC

Thin strands of glass through which light beams are transmitted; capable of carrying very large amounts of information over long distance.

FLEXIBLE RATES

Flexible rates with price floors set at the LEC's incremental service cost is one common variant of banded rates. It is a form of flexible pricing that establishes only a minimum rate for the BOC service, defined by a "price floor." LECs are thus given the authority to increase or decrease a service rate to any level as long as that rate is in excess of the price floor. The price floor is generally set at the incremental service cost of the LEC.

GRID

The electric transmission grid.

IMPUTATION

Assignment of separate costs or prices to a service or function provided by a LEC, where such separate costing or pricing facilitates the sale of LEC services to a competitive for re-sale.

INCENTIVE REGULATION (FOR **CONSERVATION PROGRAMS)**

A comprehensive approach to regulatory reform which recognized the traditional disincentives to program implementation such as lost revenues.

IPP

Independent Power Producers.

INDIVIDUAL CASE BASIS CONTRACTS (ICB) Customer-specific tariff offerings tailored to the customer's unique service, cost, and price requirements. Typical application is for large Centrex users. In many instances, LECs are required to price ICB rates in excess of incremental costs. There is, however, no obligation imposed on LECs to offer ICB contracts to any customer who requests one; as such, this device can be utilized to target and to favor those customers for whom actual competitive alternatives exist.

INTERACTIVE SERVICES

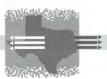
Services that enable users to communicate with a computer or with other computer users

INTERCONNECTION

The connection of one carrier with another, i.e., the interface between carriers.

INTERLATA

The transmission of voice, video, or data information between Local Access and Transport Areas (See LATA).



INTRALATA

Transmission within a LATA of voice, video, or data information.

ISDN

Integrated services digital network. Hierarchy of digital switching and transmission systems that provides voice, data, and video over a pair of twisted wires, the most common type of customer line in the telephone network.

INTEREXCHANGE CARRIERS (IXC)

Companies such as AT&T, MCI and Sprint and resellers that carry calls between LATAs. Regulators in an increasing number of states are allowing these carriers to also carry calls between points within a LATA.

LEAST COST INTEGRATED RESOURCE PLANNING

A utility planning process which evaluates both supply-side and demand-side resource options on a level playing field to reliably meet the energy needs of customers.

LIFELINE

Service fund to help low-income telephone subscribers maintain basic telephone service.

LINK UP AMERICA

Program to provide federal assistance for one-half the cost of residential installation charges and deposits for telephone service.

LATA

Local Access Transport Areas. One of more than 160 local telephone service areas in the U. S.; for example, New York has six LATAs. As a result of the AT&T Bell system divesture, calls with both end-points within the LATA (intraLATA calls) are generally carried by the local Bell operating company.

LOCAL EXCHANGE CARRIER (LEC)

The local telephone company, a BOC or an independent, that provides subscriber lines and local calling services, and switching of voice and data communications service. Except in special cases, LECs have a monopoly on service within their LATAs and cannot offer interLATA services.

LOCAL LOOP

That part of a communications circuit between the subscriber's equipment and equipment in the central office.

LRIC

Long Run Incremental Cost.

MFJ/Modified Judgement

The 1982 AT&T Consent Decree administered by Judge Harold Green. The MFJ required AT&T to divest its twenty-two Bell operating companies, which took place on January 1, 1984. The seven Regional Holding Companies were created as parent companies for the BOCs.

MTS

Message Telecommunications Service. Basic switched long distance service designed primarily for transmission of human speech but which generally can accommodate high-speed data transmission also.

NARROWBAND

Transmission speeds of less than 64 Kbps.

NTIA

National Telecommunications and Information Agency, located in the Department of Commerce.

OPC

Office of the Public Utility Counsel.

0&M

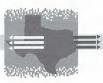
Operations and Maintenance.

OCC

Other Common Carrier.

PCS, PCN

Personal Communications System, Personal Communications Network. A system of small hand-held wireless computer-based devices combining computing, communications, and personal notebooks/organizers.



Power Cost Recovery Factor (PCRF)

A charge or credit that reflects an increase or decrease in purchased power costs not in base rates. Substantive Rule 23.66.

PBX

Private Branch Exchange. A private telephone switching system, usually located on the user's premises. Connected to a group of lines from one or more telco central offices to provide services to many users internally.

POINT TO MULTIPOINT

A circuit in which a single signal goes from one originating point to many destination points.

POP

Point of Presence. Physical location in a LATA where an IXC connects to the network of a LEC.

PORTABILITY

Ability to retain telephone number regardless of service provider.

POTS

Plain Old Telephone Service. Basic service, consisting of plain voice telephone line, a plain telephone, and access to the public switched network.

PUC

Public Utility Commission.

PURA

Public Utility Regulatory Act.

PURPA

The federal Public Utility Regulatory Policies Act of 1978.

PURCHASED POWER AND/OR ENERGY ADJUSTMENT FACTOR

A factor which, when multiplied by the number of kilowatt-hours consumed by a customer during a billing period, will produce a purchased power and/or energy adjustment to the customer. The total of these charges to all customers is the difference in the cost of power and/or energy purchased by the utility and the rates.

Substantive Rule 23.3.

QUALIFYING FACILITY

A cogeneration facility or a small power production facility which is a qualifying facility under Subpart B of the Federal Energy Regulatory Commission's regulations under the Public Utility Regulatory Policies Act of 1978, section 201, as enacted on the date of adoption of that section, with regard to cogeneration and small power facilities. Substantive Rule 23.66.

RBOC

Regional Bell Operating Company

REGIONAL HOLDING COMPANIES (RHCs)

One of the seven parent companies of the Bell operating companies. The seven RHCs/RBOCs are Ameritech, Bell Atlantic, Bell-South, NYNEX, Pacific Telsis Group, Southwestern Bell Corporation and US West. These RHCs are frequently referred to as regional Bell operating companies, although technically they are not operating telephone companies.

RESALE

The purchase of unbundled functions from a competitor (LEC) and combining those functions with the purchaser's provided functions and services to offer a competing telecommunications service.

RSA

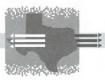
Rural Service Area.

SECTION 42 PROCEEDING

Action initiated by the PUC upon complaint or on its own motion to determine whether a utility's rates are at the appropriate rate.

SECTION 43 PROCEEDING

Action initiated by a utility requesting PUC approval for a rate increase.



SHORT HAUL MILEAGE BANDS

SIGNALLING SYSTEM 7 (SS7)

A technology that allows communications between telephone company

switches outside of the voice path. It allows for faster call set-up times, economizes on the use of transmission facilities and allows for the pro-

vision of new services such as "caller ID."

SPECIAL ACCESS

SOAH State Office of Administrative Hearings.

SUBSCRIBER LINE CHARGEAn access charge paid by the telephone subscriber to defray a portion of

the expense of providing the subscriber's access lines. The charge is a fixed monthly fee assessed by the telephone company on each line of a subscriber. The amount of the monthly charge per line depends on deci-

sions of federal and state regulatory agencies.

SUPPLY-SIDE EFFICIENCY Efficiency activities on the utility side of the meter including improve-

ments in the production, transmission, and distribution of electricity.

SUPPLY-SIDE RESOURCES Resources which could meet future customer needs via increased pro-

duction of electricity.

SWITCHED LINECommunications link for which the physical path, established by switch

in response to dialing, may vary with each use.

SWITCHING The process of transferring a connection from one telephone circuit to

another by interconnecting the two circuits.

TELCO Telephone Company.

TELECOMMUTINGThe use of telecommunications to facilitate "working at home", which

reduces travel to and from work.

TELECONFERENCING A conference between persons linked by a telecommunications system.

Can be audio only; can be video one-way and audio the other; can be

video both ways.

TELEMEDICINEThe application of telecommunications and information resources to the

health field to facilitate delivery of medical information to both practi-

tioners and consumers.

TELEPHONY Voice telecommunications.

TRANSPORT The movement of long distance calls between the telephone company

"central office" and the long distance carrier "POP".

TRUNK LINECables or other channels containing numerous shared telephone circuits

used to interconnect telephone switching centers.

Unbundling Refers to separating basic network functions provided by a LEC and

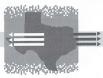
offering these services for resale.

UNIVERSAL SERVICE Refers to the goal of providing voice telephone service at affordable

rates to virtually every household.

WEIGHTED AVERAGE PRICINGWithin price cap "baskets": A common feature of certain price cap-type

incentive regulation plans is the ability of the LEC to increase or decrease a service rate to any level (usually within certain fairly broad limits) so long as the weighted average rate of all services within a designated "basket" of services do not exceed the total change in price allowed by the price cap formula. Thus, if relatively competitive and



non-competitive services happen to share the same "basket," the BOC can easily satisfy the price cap constraint while still targeting individual service rate changes with impunity.

WATS Wide Area Telephone Service.

WIRE CENTER The serving central office of a LEC.

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