Oklahoma Electric Restructuring Advisory Committee

An Advisory Committee to the Governor and Legislature to continue the examination of electric industry restructuring issues

Interim Report Relating to Transmission Issues

Electric Restructuring Advisory Committee's Examination and Interim Findings related to Transmission Issues (September-December, 2001)

Preface

This interim report is a summary of presentations and findings made as a part of the Electric Restructuring Advisory Committee's examination of transmission issues. Sommer Hibdon-Dodd, Mary Jo Mitts, and Michael Kiefner of the Senate Staff and Kim Bishop and Nancy Marshment of the House Staff provided assistance in selecting site locations, preparing and arranging for presentations and providing public notice to interested parties of each meeting. In addition Senate and House staff assisted in the preparation of this interim report.

A special acknowledgement is given to Matthew Lindsey, a University of Tulsa student and Truman Scholar, who also provided invaluable assistance to the Advisory Committee. Matt's contributions included assistance with audio-visual presentations at each hearing, coordination and maintenance of the web site, www.restructureok.net and assistance in preparation of the interim report.

Lee W. Paden
Law Offices of Lee W. Paden, P.C.
1201 East 33rd Street
P.O. Box 52072
Tulsa, Oklahoma 74152-0072

Chapter 1 Introduction

Electric Restructuring in Oklahoma

The Oklahoma Legislature has been discussing electric restructuring for several years. Hearings on issues relating to competition began in earnest in 1995. Since that time, the Legislature has had electric proposals pending in every legislative session

The Electric Restructuring Advisory Committee to the Governor and the Legislature was established by legislative mandate. It was formed to continue the examination of electric industry restructuring issues.

History of Creation of Electric Restructuring Advisory Committee

Senate Bill 500/888

The Electric Restructuring Act of 1997 and the technical amendments adopted in 1998 were enacted by the Legislature to provide for the orderly examination and implementation of consumer choice in Oklahoma. Its provisions established a study process that required the Joint Electric Utility Task Force, a 14 member legislative body, to examine more than 40 issues that might impact Oklahoma customers, electric providers and political subdivisions. The Act established an implementation date of July 1, 2002 for all retail consumers to choose their retail electric energy supplier. (See 17 O.S. 2001 Sections 190.1, et seq.)

Following the passage of the Electric Restructuring Act of 1997, the Joint Electric Utility Task Force and the Oklahoma Corporation Commission conducted a study of Independent System Operator (ISO) issues. A report of the ISO study was provided to the Legislature on February 1, 1998. The consensus reached in that study concluded that the management of Oklahoma's transmission system by a regional system that would encompass Oklahoma and other jurisdictions would be in the best

interests of consumers. An ISO or other regional entity to operate the transmission grid was recommended. The study determined that a transmission management system that was an "Oklahoma only" transmission system might work but would not provide the benefits of a regional approach.

The Joint Electric Utility Task Force established 6 working groups in September of 1998. These working groups conducted the study of the remaining issues identified in the Electric Restructuring Act of 1997. Extensive hearings and meetings were held from late October 1998 through August 1999. More than 100 working group meetings (including sub-group sessions) were held during that period. Approximately 300+ hours of open discussion and public comment occurred during the working group meetings. The Joint Electric Utility Task Force adopted and submitted a final report, with findings and alternatives, on September 30, 1999.

Senate Bill 220

In the Second Session, 47th Legislature, 2000, Senate Bill 220, a bill to authorize the implementation process for electric restructuring by the July 1, 2002 date was introduced. The conference committee substitute for SB 220 was defeated on the final day of the session.

Senate Bill 440

Senate Bill 440 was introduced in the 1st Session of the 48th Legislature (2001). The legislation had two specific purposes. First, it created the Electric Restructuring Advisory Committee to the Governor and the Legislature, a committee composed of legislators and executive branch officials, tasked to continue the examination of electric restructuring issues. Second, the legislation delayed implementation of electric restructuring until the Advisory Committee completes its final report and enabling legislation is adopted.

Additionally, the legislation required that this interim report on transmission issues be issued by the Advisory Committee no later than December 31, 2001 and that the final report be submitted to the Governor, President Pro Tempore of the Senate and the Speaker of the House of Representatives no later than

December 31, 2002. The Governor signed this Act on June 4, 2001.

A principal provision of Senate Bill 440, relating to the establishment and duties of the Electric Restructuring Advisory Committee, is contained in Section 4 of the Act. It has been included in the Oklahoma Statutes as:

§17-190.20. Electric Restructuring Advisory Committee.

Cite as: 17 O.S. 190.20

A. There is hereby established the Electric Restructuring Advisory Committee to the Governor and the Legislature to continue the examination of electric industry restructuring issues. The Advisory Committee shall be composed of nine (9) members as follows:

1. The Chair of the Senate Energy, Environmental Resources and Regulatory Affairs Committee;

2. The Chair of the House Energy and Utility Regulation Committee;

3. A member of the minority party of the Oklahoma State Senate, appointed by the Senate Minority Floor Leader;

4. A member of the minority party of the Oklahoma House of Representatives, appointed by the House Minority Floor Leader;

5. The Governor, or a designee;

6. The Attorney General of Oklahoma;

7. A Corporation Commissioner, selected by majority vote of the Corporation Commissioners;

8. The Superintendent of Public Instruction; and

9. The Vice Chair of the Oklahoma Tax Commission.

B. All meetings of the Electric Restructuring Advisory Committee shall be open to the public. Meeting agendas, dates and locations shall be determined by mutual agreement of the Governor, or his designee and the Chair of the Senate Energy, Environmental Resources and Regulatory Affairs Committee and the Chair of the House Energy and Utility Regulation Committee. Public notice of such meetings shall be issued by the Senate and House of Representatives staff providing support to the Advisory Committee. Any reports or other relevant materials issued by the Advisory Committee shall be made available to the public.

C. Members of the Advisory Committee shall be reimbursed by their respective agencies for necessary travel expenses incurred in the performance of their duties in accordance with Section 456 of Title 74 of the Oklahoma Statutes, the State Travel Reimbursement Act, or in accordance with the policies of the members' respective agencies.

D. The Advisory Committee shall:

1. Study the current status of Oklahoma's electrical transmission system and the study performed by the Southwest Power Pool to identify potential points of congestion and suggested future transmission expansion including the financial impact of potential upgrades and improvements;

2. Examine and review the report on electric issues submitted to the Legislature on October 1, 1999;

3. Analyze the current operational characteristics and control of electrical facilities provided by the electric industry in this state;

4. Solicit public opinions from Oklahoma consumers;

5. Review any proposed federal legislation relating to electric restructuring which may affect the electric industry in this state;

6. Examine opportunities to encourage development of zero-emission electric generation facilities;

7. Identify management and control practices adopted by other states relating to the implementation of electric restructuring and recommend those practices that may benefit consumers, business entities and political subdivisions of this state; and

8. Identify any other issues which are deemed to be relevant and necessary for the Advisory Committee to carry out its duties as specified herein.

E. The Advisory Committee shall prepare an interim report relating to transmission issues no later than December 31, 2001.

F. The Advisory Committee shall, by majority vote, adopt a final report to be delivered to the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives no later than December 31, 2002.

G. Notwithstanding the provisions of Sections 190.2, 190.4 and 190.5 of Title 17 of the Oklahoma Statutes, that created an implementation date for consumer choice of retail electric energy suppliers, such consumer choice of retail electric energy suppliers shall not be implemented in this state until:

1. The final report of the Advisory Committee has been received by the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives; and

2. Electric restructuring enabling legislation is adopted by the Legislature and signed by the Governor.

H. The Senate and House of Representatives shall provide staff support as required by the Advisory Committee and the Advisory Committee shall be authorized to employ any legal counsel, independent consultants or other persons as necessary to assist the Advisory Committee in the performance of its duties. The Advisory Committee may also utilize the expertise of the Corporation Commission, the Tax Commission or any state agency in the performance of its duties.

I. The Advisory Committee shall remain in effect and operate as herein directed until its termination, which shall be no later than January 1, 2005. The Advisory Committee may elect, by majority vote, to terminate its operations at an earlier date.
(Added by Laws 2001, c. 397, § 4, emerg. eff. June 4, 2001.)

Chapter 2

Advisory Committee Process and Procedures

Membership of Advisory Committee

Senator Kevin Easley-Senate Energy Chair

Senator Easley, Broken Arrow, is the Chairman of the Senate Energy and Natural Resources Committee. He was elected to the Senate in 1990 after serving 6 years as a member of the House of Representatives.

Representative Larry Rice-House Energy Chair

Representative Rice, Pryor, is the Chairman of the House Energy and Utility Regulation Committee. He was elected to the House of Representatives in 1986.

Mike Hunter-Secretary of State-Governor's Representative

Secretary of State Mike Hunter, Oklahoma City, was appointed by Governor Frank Keating to serve in 1999. From 1984 to 1990, he served as a member of the House of Representatives. He served as general counsel of the Oklahoma Corporation Commission in 1993 and 1994.

Drew Edmondson-Attorney General

Attorney General Drew Edmondson, Oklahoma City and Muskogee, was elected in 1994. Prior to service as Oklahoma's Attorney General he was elected to serve as District Attorney of Muskogee County from 1982 to 1992. He was in the private practice of law from 1992 to 1994 in Muskogee.

Denise Bode-Corporation Commission Chair

Corporation Commission Chair Denise Bode, Oklahoma City and Geary, was appointed to the Corporation Commission in 1997 by Governor Frank Keating and was elected to serve a full term in 1998. Prior to service as a member of the Corporation Commission, she was a founding partner of Gold and Liebengood in Washington, D.C. She has also served as President of the

Independent Petroleum Association of America (IPAA). She served as legal counsel for Oklahoma Senator David Boren.

Sandy Garrett-Superintendent of Public Instruction

Superintendent of Public Instruction Sandy Garrett, Oklahoma City, was elected in 1990 and reelected in 1994 and 1998. Prior to her election she served as Secretary of Education from 1988 to 1994. She served as a classroom teacher and coordinator of gifted programs for 15 years.

Jerry Johnson-Vice Chair-Oklahoma Tax Commission

Vice Chairman Jerry Johnson, Oklahoma City was appointed to serve as Vice Chairman of the Oklahoma Tax Commission in 1998. Prior to service on the Oklahoma Tax Commission he was a principal staff member for the Oklahoma State Senate.

Senator Jerry Smith-Minority Senate Member

Senator Jerry Smith, Tulsa, was elected to the Senate in 1980. He also served as a member of the House of Representatives from 1972 to 1980. He maintains an active private practice of law in Tulsa.

Representative John Wright-Minority House Member

Representative John Wright, Broken Arrow, was elected to the House of Representatives in 1998 and reelected in 2000. He serves as a member of the Education, County and Municipal Government, Human Services, and Public Health Committees.

Meeting Format, Agenda and Schedules

At the Advisory Committee's organizational meeting held in August 2001, the meeting format, schedule and agenda criteria were established. Since an interim report on transmission issues is due by December 31, 2001, the Advisory Committee elected to concentrate on transmission issues in meetings to be held during the remainder of the year. Monthly meetings of the Advisory Committee were scheduled at locations outside the Capitol, to allow broader involvement of Oklahoma citizens in this important process. Issues of general concern, relating to electric restructuring, were allowed to be voiced to the Advisory Committee during these public meetings.

Meetings were held on August 28, September 19, October 17, November 7, ~~and~~ December 5, and December 19. A final meeting to complete the interim report was scheduled to be held on December 27th, but was cancelled.

General Restructuring Issues

The Advisory Committee was provided general information by the Oklahoma Corporation Commission staff on Oklahoma electric providers, the results of a study conducted by the Oak Ridge National Laboratory analyzing potential economic impacts of electric restructuring on retail electric rates for Oklahoma, and information on legislative initiatives pending in Congress and at the Federal Energy Regulatory Commission concerning proposed changes that might impact Oklahoma.

Transmission Owners and Operators

Oklahoma has six (6) entities that own and operate major transmission systems in this state. They are:

- Southwestern Power Administration
- OGE Electric Services
- KAMO Electric Cooperative
- AEP/Public Service Company of Oklahoma
- Western Farmers Electric Cooperative
- Grand River Dam Authority

Each transmission owner and operator was requested to provide the Advisory Committee information about their system. The staff provided a list of items that each transmission owner and operator should present to the Advisory Committee. That list included:

What does your system look like?
Miles of line
Ratings of lines
Transformer Stations (Major)
How is your system interconnected?
With other in-state transmission companies
With other states
Do you have points on your system that are congested, pinched, etc. and how do you see making corrections to those potential problems.
How much time is needed to fix problem areas?
Who should pay to fix problem areas?

All transmission owners and operators made presentations during the meetings.

Transmission Users

All of the transmission owners and operators are also transmission users. In addition, the staff invited current and potential transmission users of the Oklahoma transmission system to provide input during the hearing process. Current and potential users consisted mostly of electric wholesale generators that have constructed, are constructing or are planning to construct new electric generating facilities in Oklahoma. The list included:

- Calpine Corporation
- NRG Energy
- ONEOK
- Tenaska, Inc.
- Cogentrix Energy
- Energetix
- KM Power
- Smith Cogeneration
- AES
- Oklahoma Wind Power Initiative
- Oklahoma Municipal Power Authority
- Duke Energy
- Mustang Power LLC

Each transmission user or potential transmission user was requested to provide the Advisory Committee information about their system. The staff provided a list of items that each should present to the Advisory Committee. That information requested included:

-Amount of generation to be put on transmission system.

-Potential points of congestion, pinched systems, need for expansion.

-Time frame needed to correct problem areas.

-Who should pay to fix problem areas.

All transmission owners and operators, the Oklahoma Wind Power Initiative, Energetix, Calpine, Translink and the Municipal Electric Systems of Oklahoma made presentations concerning transmission use.

Public Comments

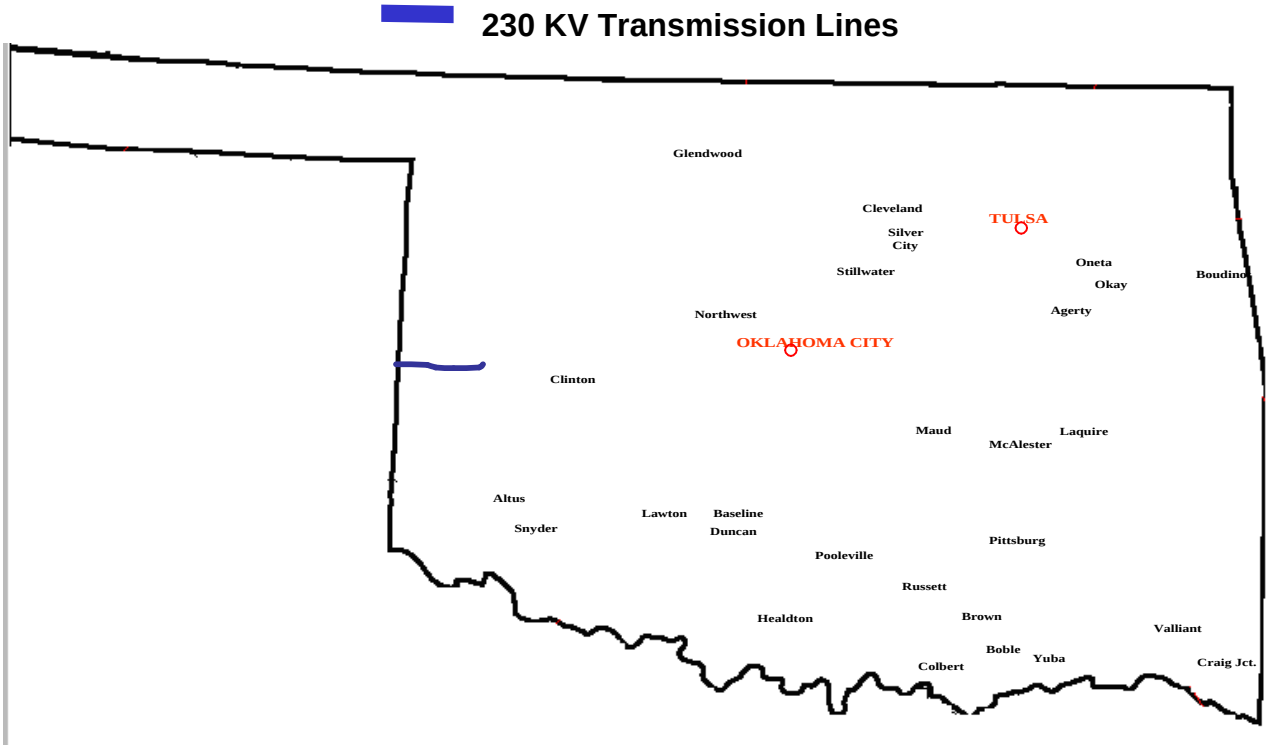
An integral part of each Advisory Committee meeting was the Public Comment period. Public comments were accepted from any individual or group interested in presenting comments, suggestions, or observations. Formal presentations by the Oklahoma Industrial Energy Consumers, Solomon Smith Barney, American Association of Retired Persons and Neighbor for Neighbor were also presented to the Advisory Committee. In addition, comments from the public were received at each meeting. During this process, comments from Goodyear Tire Co. and a number of other interested individuals were presented.

Chapter 3

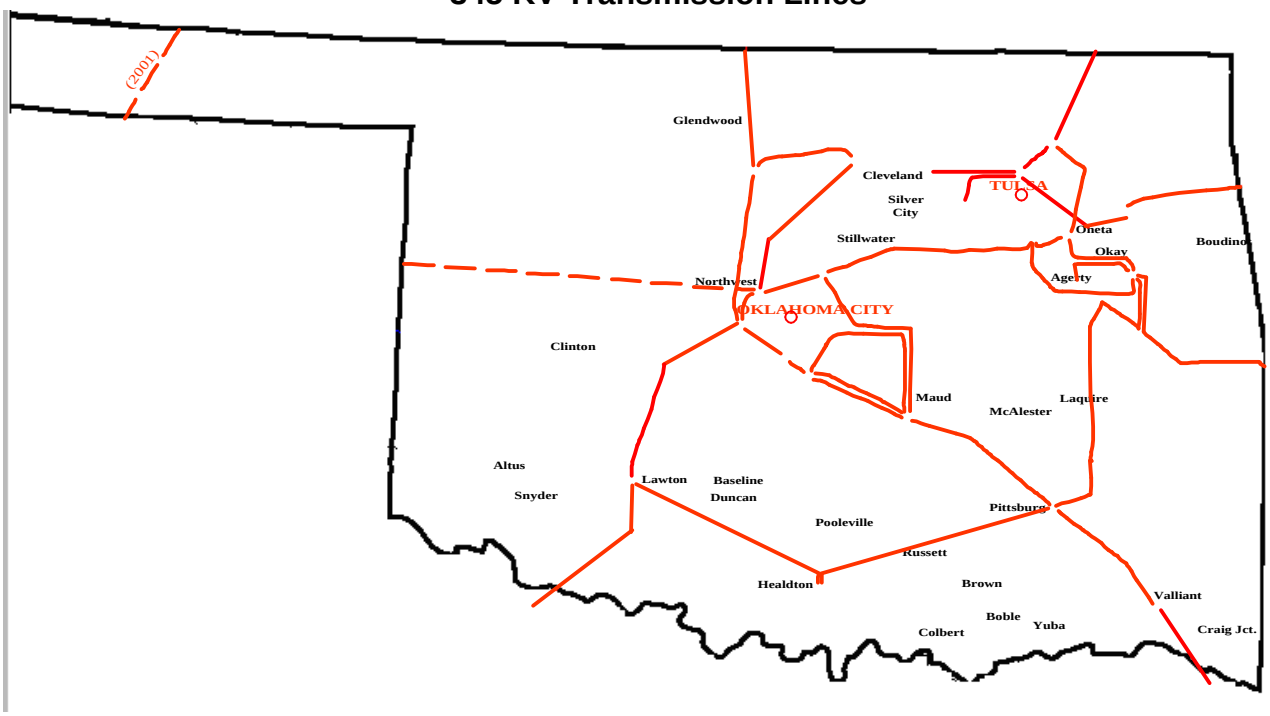
Examination of Oklahoma's Electric Transmission System

General Description of Oklahoma's Electric Transmission System

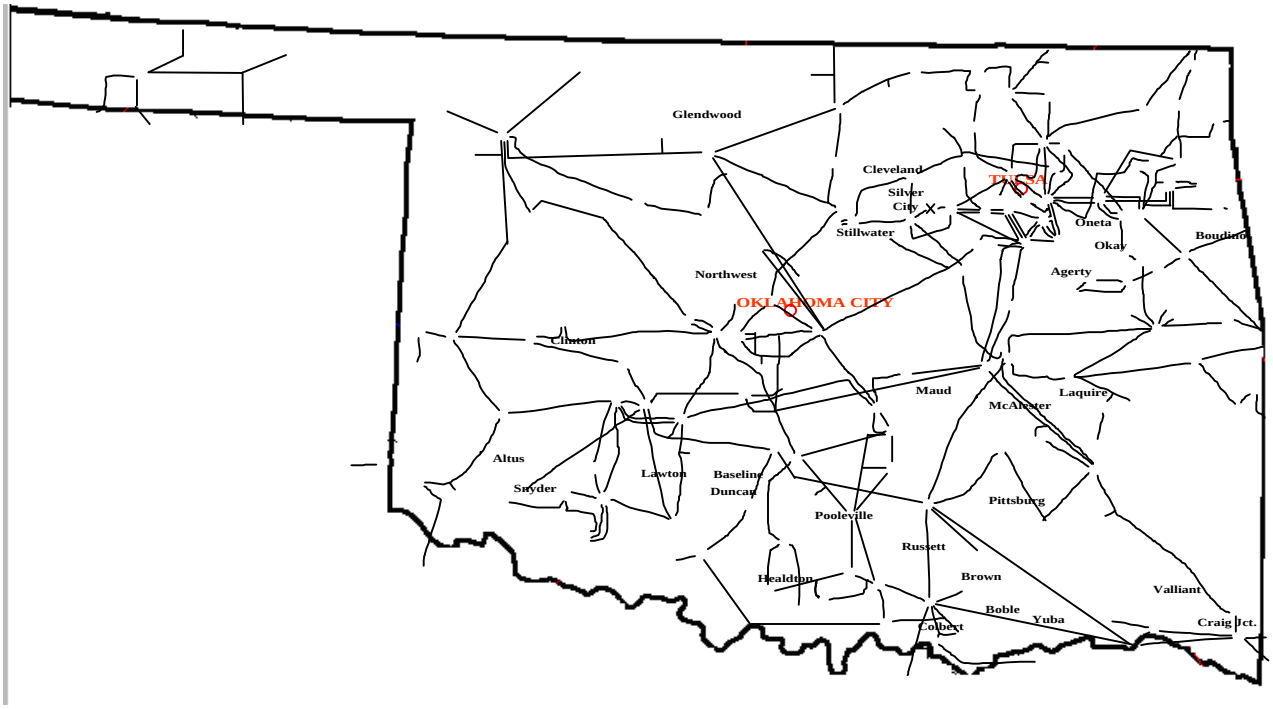
Maps of Oklahoma's Transmission System

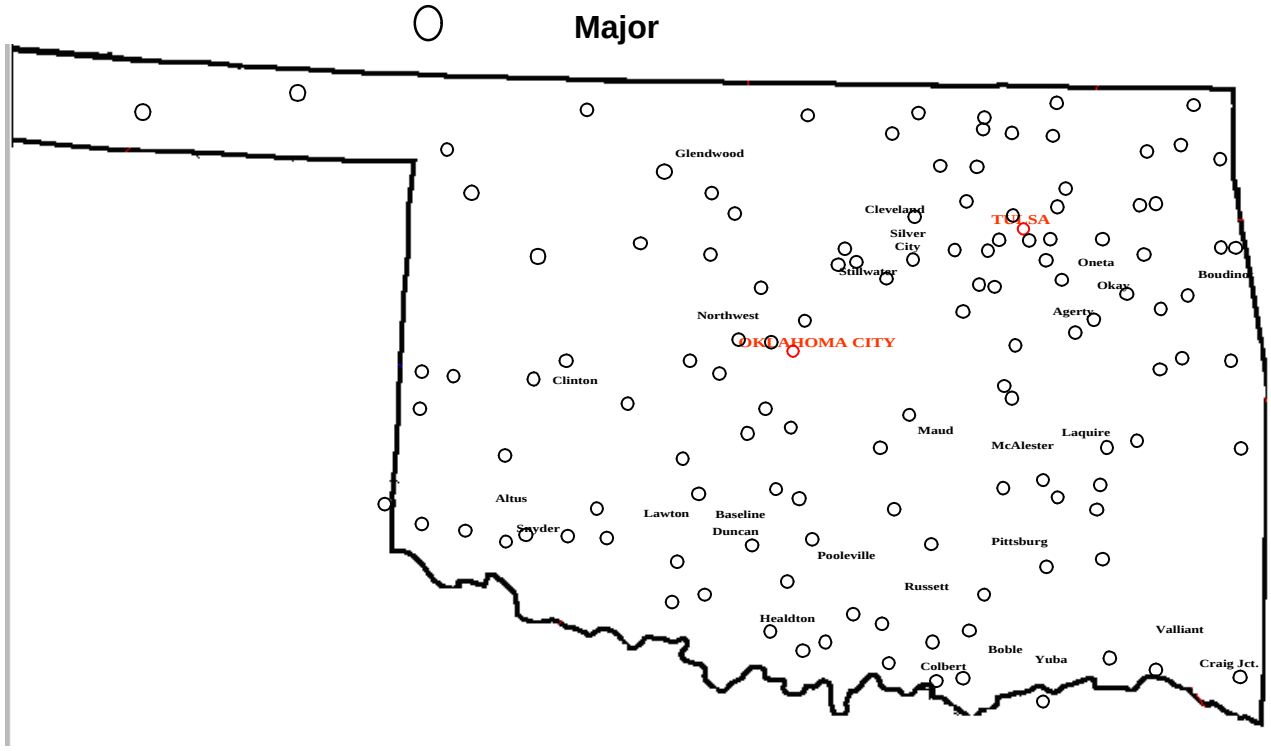


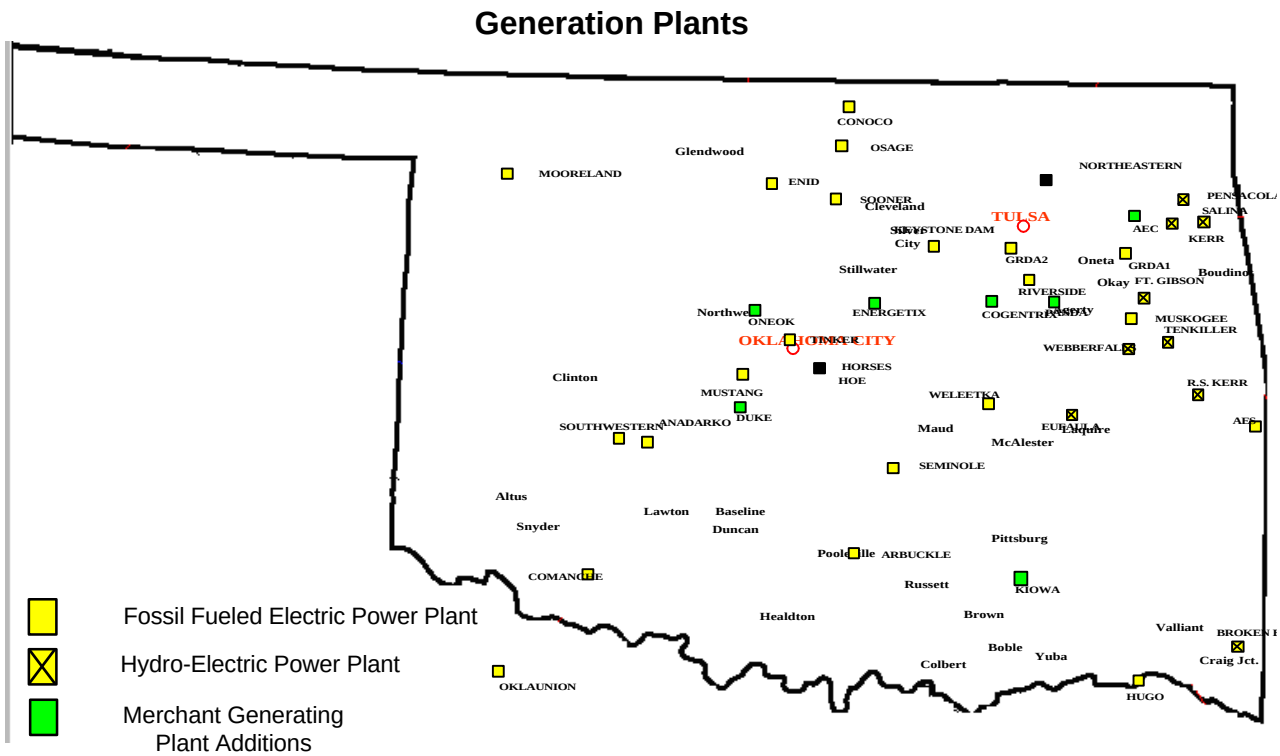
345 KV Transmission Lines



115-161 KV Transmission Lines




Major
Glendwood
Cleveland
TULSA
Silver City
Stillwater
Oneta
Boudinot
Okay
Agerty
Northwest
OKLAHOMA CITY
Clinton
Maud
McAlester
Laquire
Altus
Lawton
Baseline
Duncan
Snyder
Pooleville
Pittsburg
Russett
Healdton
Valliant
Boble
Yuba
Colbert
Craig Jct.


Generation Plants
CONOCO
OSAGE
Glendwood
MOORELAND
ENID
NORTHEASTERN
SOONER
Cleveland
TULSA
AEC
KERR
City
GRDA2
Oneta
GRDA1
Stillwater
Okay
FT. GIBSON
Boudinot
RIVERSIDE
Northwest
ONEOK
ENERGETIX
MUSKOGEE
TENKILLER
OKLAHOMA CITY
WEBBERFALLS
HORSES
HOE
Clinton
MUSTANG
R.S. KERR
WELEETKA
DUKE
SOUTHWESTERN
ANADARKO
Maud
McAlester
SEMINOLE
Altus
Lawton
Baseline
Snyder
Duncan
Pittsburg
ARBUCKLE
COMANCHE
Russett
KIOWA
Healdton
Brown
Valliant
Boble
Yuba
Colbert
Craig Jct.
OKLAUNION
HUGO
Fossil Fueled Electric Power Plant
Hydro-Electric Power Plant
Merchant Generating Plant Additions

Regulation of Transmission Systems

OG&E Electric Services and AEP/Public Service Company of Oklahoma historically have been regulated by the Federal Energy Regulatory Commission (FERC). The Energy Policy Act of 1992 and Order Number 888 (and its amendments) issued by FERC require all utilities subject to its jurisdiction to provide transmission service to any utility, Power Marketing Administration, or any other generating entity selling electricity for resale.

In response to the rules adopted by FERC, both OG&E Electric Services and AEP/Public Service Company of Oklahoma have filed open access transmission tariffs (OATTs) with FERC. The Southwest Power Pool (SPP) administers the transmission tariffs of its members. The SPP also has a filed OATT that incorporates the OATTs of OG&E Electric Services, AEP/Public Service Company of Oklahoma, and other transmission providers in the SPP.

KAMO Electric Cooperative, Western Farmers Electric Cooperative, Grand River Dam Authority, and the Southwestern Power Administration are not subject to regulation by FERC. Each of these entities has either voluntarily agreed to abide by the SPP filed tariff or has voluntarily filed open access tariffs with FERC which are incorporated in the SPP OATT filing.

The Oklahoma Corporation Commission (OCC) also regulates investor-owned utilities such as OG&E Electric Services and AEP/Public Service Company of Oklahoma. The OCC has jurisdiction over the retail sales of electricity of these companies

Oklahoma Transmission Owners and Operators

Description of Owners and Operators

AEP/PSO:

AEP is a regional investor-owned utility with operations in eleven states. Its holdings in Oklahoma include Public Service Company of Oklahoma (AEP/PSO), an electric utility generating, transmitting and distributing electricity to wholesale and retail customers. AEP/PSO is currently a member of the SPP.

SNAPSHOT:

Company Name	AEP/PSO
Market type	Retail & wholesale
Generating Capacity	3,916 MW (in OK)
# of Customers	496,714
Oversight	OCC, FERC, SPP

Grand River Dam Authority:

The Grand River Dam Authority (GRDA) is owned and operated by the State of Oklahoma and provides wholesale and retail electricity to customers in Oklahoma, Arkansas, Kansas and Missouri. Its wholesale customers include 13 municipals, and 1 electric distribution cooperative. GRDA also provides retail electricity to the Mid-America Industrial Park. GRDA is a member of SPP.

SNAPSHOT:

Company Name	GRDA
Market type	Retail & wholesale
Generating Capacity	1,319 MW
# of Customers	13 municipals, 1 cooperative, 60 industrial customers
Oversight	Self, FERC (voluntary), and SPP

KAMO* Electric Cooperative, Inc.*:

KAMO Electric Cooperative, Inc. is a generation and transmission cooperative operating in Northeast Oklahoma and Southwest Missouri. KAMO is a 30% owner of Associated Electric Cooperative Inc., (AECI) and also is a joint owner (38%) of GRDA Plant #2. KAMO provides power only to wholesale customers, consisting primarily of electricity distribution cooperatives.

SNAPSHOT:

Company Name	KAMO Electric Cooperative, Inc.
Market type	Wholesale
Generating Capacity	198 MW (in OK)
# of Customers	17 distribution cooperatives (277,000 meters)
Oversight	Self, RUS, FERC (voluntary)

OG&E Electric Services

OG&E Electric Services (OG&E) is the electricity generation, transmission, and distribution subsidiary of OG&E Energy Corporation, an energy holding company headquartered in Oklahoma City. OG&E Electric Services provides retail service to customers in Oklahoma and western Arkansas. OG&E is currently a member of SPP.

SNAPSHOT:

Company Name	OG&E Electric Services
Market type	Retail & wholesale
Generating Capacity	5,716 MW
# of Customers	646, 201
Oversight	OCC, APSC, FERC, SPP

Southwestern Power Administration:

The Southwestern Power Administration (SWPA), a federal power marketing agency, is charged with the marketing of electricity from federal hydroelectric dams in a six state region. SWPA gives preference in the sale its power to federal installations, public bodies and cooperatives. SWPA is a member of SPP.

SNAPSHOT:

Company Name	SWPA
Market type	Wholesale
Generating Capacity	514 MW (in OK)
# of Customers	27 cooperatives, 23 municipals, 3 military installations
Oversight	FERC and SPP (voluntary)

Western Farmers Electric Cooperative:

Western Farmers Electric Cooperative is a generation and transmission cooperative that provides wholesale power to 19 electricity distribution cooperatives in Oklahoma and 15 municipalities in Oklahoma, Arkansas, Kansas and Texas. Western Farmers is a member of SPP, and operates its own control area within SPP.

SNAPSHOT:

Company Name	Western Farmers
Market type	Wholesale
Generating Capacity	1,127 MW
# of Customers	19 electricity distribution cooperatives (250,000 meters), 15 municipalities
Oversight	Self, RUS, FERC (voluntary) and SPP

Configuration of Each Transmission System

AEP/PSO

Line Voltage (KV)	Miles
345	600
230	34
161	8
138	2,082
115	11
<69	860
TOTAL	**3,595**

Grand River Dam Authority

Line Voltage (KV)	Miles
345	111
230	0
161	94
138	1,578
115	40
<69	649
TOTAL	**1,175**

KAMO Electric Cooperative, Inc.

Line Voltage (KV)	Miles
345	0
230	0
161	34
138	208
115	11
<69	1,755
TOTAL	**2,008**

OG&E Electric Services

Line Voltage (KV)	Miles
500	45
345	935
230	0
161	183
138	1,820
115	0
<69	1596
TOTAL	**4,579**

Note: Approximately 4,200 miles located in Oklahoma.

Southwestern Power Administration

Line Voltage (KV)	Miles
345	0
230	0
161	214
138	164
115	0
<69	0
TOTAL	**378**

Western Farmers Electric Cooperative

Line Voltage (KV)	Miles
345	0
230	0
161	7
138	1,578
115	0
<69	1,894
TOTAL	**3,479**

Note: Some portion located in Kansas and Texas.

Transmission Users

General Description of Oklahoma Transmission Users

All Oklahoma transmission owners and operators also transmit electricity over the transmission systems located in this state. Western Farmers Electric Cooperative and KAMO Electric Cooperative, Inc. use the transmission system to supply electricity to wholesale customers, mostly electric distribution cooperatives, from generation facilities they own or purchased power acquired from other generators.

The Southwestern Power Administration uses the transmission system to supply wholesale customers, usually municipalities, federal installations and/or electric distribution cooperatives. Grand River Dam Authority uses the transmission system to provide both wholesale and retail electric service. GRDA provides wholesale electricity to several municipal systems in Oklahoma, Arkansas and Missouri, an electric generation and transmission cooperative, several electric distribution cooperatives and a number of retail electric customers located in the Mid-America Industrial Park.

OG&E Electric Services and AEP/PSO use the transmission system to move electricity, almost exclusively generated by its own generating facilities, to retail customers served by each company's distribution system. Both investor-owned utilities, however, also use the transmission system to serve wholesale customers within the state of Oklahoma. OGE Electric Services also uses the transmission system to serve customers outside the state of Oklahoma.

The Energy Policy Act of 1992 created a new class of generator, the exempt wholesale generator (EWG). An EWG is subject to limited oversight by the Federal Energy Regulatory Commission but is not subject to other regulatory oversight. These EWGs are using, and will continue to use, the Oklahoma transmission system to deliver their electricity to wholesale customers within and outside the state of Oklahoma.

In 1998, Associated Electric Cooperative, Inc. (AECI) filed the first EWG request for a construction permit for an independent power facility to be located near Chouteau in the Mid-America Industrial Park. (The AECI permit, Oklahoma's first EWG construction permit, was granted in March, 1999. The plant began production of electricity for sale to wholesale customers in April 2000.) More than 20 other EWG permit applications have been filed since then. Six (6) new

generating plants are now operational, one (1) facility is completing testing and will soon be operational, six (6) plants are currently under construction and eight (8) construction permits are under examination by the Oklahoma Department of Environmental Quality. One (1) application for a construction permit has been withdrawn.

New/Proposed Power Plants
(Since 1999)

Facility	Permit Status	Fuel	Gen. Capacity MW	Fuel/yr BCF	Annual NOx Tons/yr	NOx Per Mw	Permitting Status
Base Units							
Thunderbird – Thunderbird	Public Review	Gas	900	40.2	1,078	1.2	Permitting
	Permit Status	Fuel	Gen. Capacity MW	Fuel/yr. BCF	Annual NOX Ton/yr	NOX per MW	Permitting Status
SmithCoGen – Lawton	Tech. Review	Gas	600	26.8	1,487	2.5	Permitting
Energetix – Great Plains	Tech. Review	Gas	600	26.8	661	1.0	Permitting
Duke - Stephens	Public Review	Gas	620	27.7	262	0.4	Permitting
Mustang - Mustang	Public Review	Gas	310	3.3	991	3.2	Permitting
Mustang - Harrah	Public Review	Gas	310	3.3	991	3.2	Permitting
Energetix - Lawton	Tech. Review	Gas	600	26.8	711	1.4	Permitting
Genova – Genova	Admin. Review	Gas	550	24.5	230	0.4	Permitting
Cogentrix – Green Country	10/1/99	Gas	800	35.8	806	1.0	Testing
Calpine - Oneta	1/21/00	Gas	1,150	51.3	1,256	1.1	Constructing
Kiowa - Kiamichi	5/3/01	Gas	1,200	53.6	1,845	1.5	Constructing
SmithCoGen - Pocola	8/16/01	Gas	1,200	53.6	1,964	1.6	Constructing
Energetix – Webbers Falls	10/22/01	Gas	850	38.0	686	0.8	Constructing
Redbud – Redbud	Public Review	Gas	1,220	54.6	628	0.5	Constructing

Peaking Units	Permit Status	Fuel	Gen. Capacity MW	Fuel/yr BCF	Annual NOx Tons/yr	NOx Per Mw	Permitting Status
KM Power - Pittsburg	5/3/01	Gas	550	5.6	697	1.3	Constructing
Base Units	**Permit Status**	**Fuel**	**Gen. Capacity MW**	**Fuel/yr BCF**	**Annual NOx Tons/yr**	**NOx Per Mw**	**Permitting Status**
AECI - Chouteau	3/24/99	Gas	530	23.7	774	1.5	Operational
AEP/PSO – Northeastern	10/18/99	Gas	492	22.0	887	1.8	Operational
NRG McClain – McClain Energy	1/21/00	Gas	520	23.2	508	1.0	Operational
Peaking Units	Permit Status	Fuel	Gen. Capacity MW	Fuel/yr. BCF	Annual NOX Ton/yr	NOX per MW	Permitting Status
OG&E - Horseshoe	2/3/00	Gas	90	0.9	39	0.4	Operational
ONEOK - Edmond	5/11/00	Gas	320	3.3	735	2.3	Operational
WFEC GENCO – Anadarko	11/30/00	Gas	94	1.0	160	1.7	Operational
Withdrawn							
Tenaska - Seminole	10/15/01						Withdrawn

As of 11/07/01
Oklahoma Department of Environmental Quality, Air Quality Division

Since March 1999, 2,046 MWs of new generating capacity have been added in the State of Oklahoma. 800 MWs of additional generating capacity will be operative shortly. 6,170 MWs of new generation is currently under construction with anticipated operation dates in 2002 and 2003. The total new generation located in Oklahoma and available for wholesale sales of electricity will total 9,016 MWs of additional capacity by the end of 2003. 4,610 MWs of proposed generation capacity is currently under review for potential development.

If all plants under review are constructed, 13,626 MWs of new electrical generation capacity within Oklahoma will be built

in Oklahoma to generate electricity that will be available for wholesale sales. These additions could have a marked impact on the flow of electricity over transmission facilities in Oklahoma and the region.

Advisory Committee Presentations

Transmission Owners and Operators and Transmission Users

Presentations made by the Transmission Owners and Operators and Transmission Users have been posted on the Internet web site, www.restructureok.net, to support the activities of the Advisory Committee. All presentations on the web site can be downloaded.

Oklahoma Corporation Commission Electric Provider Review

Providing Oklahoma consumers general information about electric restructuring was a component of each meeting. To have a better understanding of who currently generates, transmits and delivers electricity to Oklahoma consumers, the Oklahoma Corporation Commission staff provided a detailed analysis of all Oklahoma electric providers. This analysis provided information on customers, generating capacity (if applicable), miles of transmission lines, and annual electricity sales and revenues. The staff's presentation has been posted on the web site, www.restructureok.net, to support the Advisory Committee. All presentations on the web site can be downloaded.

Presentations by Interested Groups

Four groups, the Oklahoma Industrial Energy Consumers, American Association of Retired Persons, Neighbor for Neighbor and Solomon Smith Barney made formal presentations for the Advisory Committee's benefit. Those presentations have been posted on the web site, www.restructureok.net, to support the Advisory Committee. All presentations on the web site can be downloaded.

Chapter 4

Review of Southwest Power Pool (SPP) EHV Study

Description of Southwest Power Pool

The Southwest Power Pool (SPP), a not-for-profit corporation, was created in 1941 to provide critical support for the nation's defense efforts. In 1968, SPP joined the North American Electric Reliability Council (NERC), a voluntary organization created to address electric safety and reliability problems in the United States and Canada.

NERC reliability councils were originally designed to promote the reliability of the electricity supply for North America. Over the past 30 years, however, these organizations have greatly expanded their original responsibilities to meet the changing needs of the electric industry.

The original mission of SPP has also evolved and today SPP provides vital services, including monitoring, coordinating, promoting and communicating information related to security coordination, tariff administration, and reliability assessment. The SPP region has more than 4 million customers in 8 states and covers more than 400,000 square miles.

Membership

SPP members come from various segments of the electric industry. 51 members, 13 investor-owned utility companies, 7 municipal electric systems, 8 electric cooperatives, 1 federal agency, 3 state agencies, 1 independent power producer and 18 electricity marketers are located in all or parts of Arkansas, Louisiana, Mississippi, Missouri, Kansas, Oklahoma, Texas, and New Mexico.

Responsibilities

Security Coordination is an example of new and expanded responsibilities of the Southwest Power Pool (SPP). Seventeen control areas are located within the boundaries of the interconnected transmission network that covers the SPP region. Monitoring the status of the interconnected network, anticipating potential problems, taking pre-emptive action and coordinating regional responses are essential functions performed by SPP to fulfill this responsibility.

The independent administration of FERC's Open Access Transmission Tariff for transmission owners and customers to provide consistent rates, terms and conditions and provide a one-stop shopping opportunity is the foundation of the current tariff administration function performed by SPP. Tariff administration continues to be a critical element in the development of a viable wholesale market for electricity.

Among the responsibilities SPP is required to oversee, none is more critical than assessment of the reliability of existing transmission systems. The transmission system in the SPP has had few planned additions in recent years but the development of independent generation facilities and increased competition in wholesale and retail electric markets creates the need for a closer look at how transmission investment and network expansion should occur.

Expansion and improvement of the existing transmission system is not easily accomplished. First, the existing system was constructed for movement of electric energy within a confined area served by an integrated electric provider (usually a provider that owned generation, transmission and often distribution). While some transfers of wholesale power on these transmission systems have always occurred, the primary use of the transmission system was for local retail sales. The transmission of interstate wholesale electricity was not contemplated as a significant part of the historic transmission system function until the passage of the Energy Policy Act of 1992.

Second, planning and development of transmission upgrades and expansion has often been affected by outside influences that directly impacted decisions to upgrade or construct additional facilities. For example, regulatory concerns, local siting or tax concerns, and the ability to recover the costs of additional investment required to upgrade or expand the system

have played a role in development or postponement of new transmission resources or expansion of existing resources.

The SPP membership Agreement now provides for a coordinated planning and development responsibility for the region's transmission facility. This expanded responsibility is the mechanism that facilitated the SPP's EHV Study in 2000.

Purpose and Conduct of EHV Study

The Southwest Power Pool's (SPP) Membership Agreement provides that each member shall be entitled to participate in regional joint planning and coordinated operation of the Electric Transmission System (SPP Membership Agreement, Section 3.9). In November 1999, the Transmission Assessment Working Group (TAWG) was assigned the task of performing a regional bulk transmission system study by the Engineering and Operating Committee. The study's objective was to identify upgrades necessary to relieve known constraints to power transfer.

Study Process and Results

March 2001 Phase I Report

The TAWG divided the study of the regional bulk transmission system into two parts. In Phase I of the study, the approach used by TAWG was to identify current limitations to regional power transfer within SPP. Flowgates, pre-defined transmission components, were used to evaluate power transfer capability. Twenty-three (23) system constraints were analyzed using summer peak models for 2001, 2004, and 2006. Based on the working group's analysis, six (6) transmission line additions or improvements were recognized to benefit in relieving known constraints and increasing the ability of the SPP transmission system to accommodate incremental power transfer. One of those additions was located entirely within the state of Oklahoma and a second addition included a major portion to be located in Oklahoma.

Phase I Study Results

The Phase I results were presented to SPP in March 2001. The study focused on system improvements that would relieve more than one constraint. The report points out that several system upgrade options reviewed during the analysis only improved one constraint and thus did not make the final list of recommended upgrades that would be studied in the second phase.

The study simulated bulk power transfers for summer peaks in 2001, 2004, and 2006 in 12 directions across the SPP region to establish benchmark transfer capability. These directions could be classified into two categories, simultaneous and other. The SPP simultaneous exports consistently appeared to act as the catchall transfer direction for identifying the most limiting system transfer constraint.

It should be pointed out that the Phase I study was limited to existing system conditions and did not attempt to project future generation or customers that would be served by new generation. This limitation is of particular importance because it does not include all new generation facilities that are now operating in Oklahoma or in other parts of the SPP region. As each new generating facility begins commercial operation, the long-term contract for the sale and the need to deliver electricity from that new facility may positively or negatively impact the transfer capabilities of the transmission system.

The Phase I study identified 6 new transmission additions (projects) that might provide a recognized benefit to relieve known constraints and increase the ability of the transmission grid to accommodate incremental power transfer. The six projects were judged to have the best-combined performance for the summer peak seasons studied and provided a recognized benefit in relieving known constraints. The Phase I report recommended a detailed analysis of the 6 projects. The six recommended projects included two projects located within Oklahoma.

They are:

- A 32-mile 345 kV transmission line from Sooner 345kV Power Station to Cleveland 345 kV Substation (from the OGE Energy Services Sooner generating facility located in Noble County, Oklahoma to the Cleveland Substation located near Cleveland, Pawnee County, Oklahoma). The estimated cost of this project is $23,800,000 (approximately $745,000 per mile) with a 2-3 year lead-time for construction.

- A 275-mile 345 kV transmission line from Potter 345 kV Substation to Northwest 345 kV Substation (From Southwest Public Service Company's 345 kV Potter Substation near Amarillo, Texas to OGE Energy Services 345 kV Northwest Substation near Oklahoma City, Oklahoma). The estimated cost of this project is $79,200,000 (approximately $288,000 per mile) with a 4-5 year lead-time for construction.

The other projects recommended for further analysis are located in Arkansas, Kansas, Louisiana and Missouri.

The Phase I study recommended a detailed analysis of the six new projects in Phase II and suggested a 3-tiered assessment of the impact associated with implementation of the proposed projects. Criteria compliance, using NERC Planning Standards and SPP Criteria and using a single contingency loadflow analysis was recommended to provide criteria violations that will aid in justification of the project. Transfer capability using a control area to control area approach and inter-regional transfers was also recommended.

The study also recommended documentation of any adverse affects to determine if the project should be included. Additional upgrades should also be identified. Finally, transmission owners should examine construction alternatives to determine the appropriate configuration for the project. Minor changes that include other facilities, possibly of lower or higher voltage, to be implemented instead of or along with the projects should also be considered.

November 2001 Phase II Report

The 6 new projects identified in Phase I of the SPP EHV study were the subject of further detailed analysis in Phase II. The detailed analysis focused on transmission facilities rated at 230 kV and above. Several basic transmission facility upgrades required to reach base transfer levels for the Phase

I projects were identified in the detailed analysis. These suggested upgrades would be implemented prior to the construction of the Phase I projects. The upgrades would greatly enhance the transfer capability achieved by construction of the Phase I projects.

The detailed analysis eliminated one of the Oklahoma projects, the 32-mile transmission line from the 345 kV Sooner Station to Cleveland 345 kV Substation. Since the benefits provided by this project were well beyond the threshold level, 1200 MW of power transfer, less benefit was provided by this project.

The study also looked at voltage conditions to identify voltage sensitivity to cross-regional power transfer. Voltage concerns were identified in Arkansas, Kansas and Texas.

The report developed a detailed cost estimate of the remaining 5 projects. These cost estimates include basic upgrade costs necessary before the suggested project should be constructed. Supplemental upgrade costs were also included. These supplemental cost estimates identify upgrades required to improve facilities to properly utilize the capability of the new projects. The report pointed out that additional examination of costs associated with constraint mitigation indicated a need for further assessment of the true economic relationship of the upgrade costs versus transfer capability gained. Issues such as inter-regional coordination and the addition of new generating facilities were recognized as important factors that should be considered in future studies.

Phase II Study Results

The Phase II Report’s introductory section included specific points describing the nature of the study. It was a coordinated effort of the members and staff, a regional assessment initiated by a flowgate screening and assessment, a detailed examination of the Phase I projects and the impacts those projects have on the SPP network, a listing of additional constraints and costs associated with the 6 projects examined, and a preliminary regional voltage assessment. It also enumerated that the study was not to be considered a recommendation to build, a detailed evaluation of all facilities at all voltages, a state or local evaluation of export or import abilities, a commercial control area to control area study, a reliability margin analysis, a generation re-dispatch analysis, a determination of

alternatives to the 6 suggested projects or a study of the Entergy or AECI control areas.

The report recommended that caution needed to be exercised in drawing conclusions about the results of these studies. The Phase I and Phase II study process took a considerable length of time. Changes have occurred during that period that may have impacts on the assumptions used in the model. For example, new Independent Power Providers (IPPs) have constructed and are operating generating facilities that were not a part of the assumptions used in the study. Facility upgrades have also been implemented that change the assumptions. These physical changes in the generation and transmission network have significant impacts and have to be looked at individually and collectively to have a better picture of future needs.

The report explained that construction of any project may have an impact on other parts of the transmission system. For example, in the study of the Potter-Northwest 345 kV project, benefits were recognized in all the models and in relieving problems at the Elk City transformer flowgate. The project increased loading on the La Cygne-Stilwell flowgate to Entergy/Cajun in 2001. However, another project recommended in Phase I, the Wolf Creek to Lang 345 kV circuit will significantly increase the overall capacity of the La Cygne-Stilwell flowgate. As a result, the study report recommended that both projects be implemented simultaneously.

As mentioned earlier, basic and supplemental upgrades associated with the suggested projects will add additional costs to the original estimates. For the Potter-Northwest 345 kV project, an additional cost of $2, 850,000 for basic upgrades costs before the project can be considered increased the overall cost of the suggested project to $81,850,000 (Approximately $298,000 per mile). A portion of this total cost relates to transmission upgrades outside of Oklahoma.

The study concluded that transmission upgrades are needed to realize enhanced transfer capability. The changing nature of the transmission network reflects the need for long-term planning analysis and near term operational use. Local analysis of lower voltage overloads should also be a consideration in establishing the costs associated with upgrades. In addition, the assessment of the costs of upgrades needs factor in the increased transfer capability that might be achieved when a project is analyzed.

Chapter 5

Transmission Regulation in Oklahoma and Changes in the Electric Industry

Oklahoma Corporation Commission and the Federal Energy Regulatory Commission

The Oklahoma Corporation Commission (OCC), a constitutionally created regulatory body, regulates the rates, services and charges of retail electric providers in Oklahoma that are subject to its jurisdiction. Electric entities subject to its regulation include investor-owned utilities, small electric cooperatives that have not opted to be self-regulated and large electric cooperatives serving more than 17,000 meters. All of these entities provide retail electric services to Oklahoma customers. Rates and charges are established for these "bundled" services (services that include generation (or purchased power), transmission and distribution of electricity to industrial, commercial and residential consumers).

Retail electric providers in this state serve more than 1.7 million customers. Retail electric providers subject to the jurisdiction of the OCC serve approximately 75% of all retail customers. In 1999, more than 46,700,000 megawatt hours of electricity were sold to retail customers in Oklahoma. 35,000,000 megawatt hours of retail electricity sold were subject to the Commission's oversight. The average retail price for electricity in 1999 was 5.37 cents per kilowatt-hour. Oklahoma continues to have rates that are among the lowest in the region. Approximately $1.8 billion of electric revenues were collected in 1999 from entities subject to OCC review.

The vast majority of Oklahoma investor owned utility transmission facilities have historically been included in

rates and charges established by the OCC because of the retail use of the transmission system. For example, transmission facilities were constructed to serve retail customers by moving electricity from the transmission owner's generation plant to their distribution facilities. The distribution system is then used to deliver electric energy to individual industrial, commercial or residential locations. A small percentage of those transmission facilities have also been included in rates and charges set by the Federal Energy Regulatory Commission (FERC) to recognize the interstate movement of wholesale electricity sales to Oklahoma wholesale customers of the investor owned utility and to wholesale customers in other states.

The use of Oklahoma's transmission system and the transmission system in the region and across the country is changing. From 1991 to 2000, the percentage of electricity generated by non-utility generators in the United States has grown from 8% to 21%. (Electric Power Annual Report 2000, Energy Information Administration) In addition, investor-owned utilities, electric cooperatives, and municipalities have become more active in buying and selling electricity in the wholesale market, thereby requiring wholesale transmission services.

Oklahoma is experiencing growth in non-utility generation ownership with the addition of new EWGs. Transmission systems that were originally constructed to move electricity primarily for retail sales are now being asked to accommodate increased wholesale sales of electricity from both utility and non-utility generation facilities. These changing demands on a transmission system that has had few upgrades or additions have the potential to create problems and congestion.

Study of Electric Restructuring Issues by Oak Ridge National Laboratory

The Oklahoma Corporation Commission engaged the services of the Oak Ridge National Laboratory (ORNL) to conduct a study using the Oak Ridge Competitive Electricity Dispatch model to evaluate the potential price and economic impacts of restructuring the Oklahoma electric industry. The study was conducted by ORNL in two parts, Phase I concentrating on an analysis of Oklahoma using only present generation (1999) resources and customer demands and Phase II, a longer term analysis to analyze the Oklahoma power market in 2010 and incorporate new generation resources and customer demands. The Phase II report makes the finding that projected expansion in generating capacity exceeds by over 3,000 MW the demands

within the state plus the amount that could be exported with the current transmission system.

In order for the excess capacity to be sustained by out of state markets, new transmission construction and upgrades are needed. ORNL explains that expansion of the transmission system is difficult. Current transmission owners see little benefit to build, since it dilutes the value of their existing lines and/or regulated returns are low. The Phase I report is available on the Oklahoma Corporation commission website, www.occ.state.ok.us. The Phase II report has been posted at www.restructureok.net.

Energy Policy Act of 1992 (EPACT)

A significant change that affected the use of the nation's transmission facilities occurred in October 1992 when Congress passed the Energy Policy of 1992 (EPACT). This legislation dealt with a number of energy related matters, but Title VII of the Act introduced significant changes that impact both generation and transmission of electricity in the United States.

Exempt Wholesale Generators (EWGs)

EPACT authorizes the creation of Exempt Wholesale Generators (EWGs), whose owners would not become holding companies under the Public Utility Holding Company Act of 1935 (PUHCA). This exemption allows the development of non-utility owned generating facilities by EWGs, often called independent power producers, because it eliminates stringent and sometimes onerous oversight and regulatory requirements of PUHCA.

EWGs do have some regulatory constraints such as certification from the FERC. Sales of electricity can only be wholesale sales. EWG books and records must be available for inspection by state commissions to aid in the review of EWG and utility transactions.

Mandatory Open Access for Transmission Services

EPACT allows any utility, Power Marketing Administration, or any other generating entity selling wholesale electricity to apply to FERC for mandatory access to transmission facilities. In providing access to their transmission facilities, the

transmission owner must be permitted to recover costs for interconnection. The recovery of such costs is limited to such costs as are appropriate taking into account any benefits to the transmission system of providing the transmission service and the costs of any enlargement of transmission facilities. FERC is prohibited from issuing any order under EPACT which is inconsistent with any state law which governs the retail marketing areas of electric utilities.

Order 888

In 1996, FERC issued a final rule requiring open access transmission by all public utilities that own, operate or control interstate transmission facilities. Transmission owners and operators subject to FERC's jurisdiction were required to file open access transmission tariffs (OATTs) that offer others the same transmission services the transmission owners provide themselves, under comparable terms and conditions. (A separate order, Order 889, created standards of conduct and required the establishment of an Open Access Same-time Information System to make information about their transmission system available to all parties.)

Order 888 required the functional unbundling of transmission by requiring the transmission owner to separate rates for wholesale generation, transmission and ancillary services to avoid cross-subsidization, favoritism and discriminatory practices that might occur within a vertically integrated utility. By separating the transmission functions from other business activities of the company, the prospects for delivery of transmission services to all parties on equal terms will be enhanced.

If transmission customers take service under a utility's open access transmission tariff, FERC's reciprocity rules require the customer to provide open access service to the transmitting utility over transmission facilities the customer owns, controls or operates. This requirement includes transmission facilities of public power and electric cooperatives if they use the public utility's OATT.

FERC also encouraged the creation of regional organizations to help operate transmission systems, coordinate and plan transmission growth and development and monitor system reliability. The formation of independent system operators that would accept control of transmission facilities was a major element of Order 888. FERC created ISOs because it

believed that an ISO could administer fairly the open access tariff and eliminate discriminatory practices.

Order No. 2000

The progress of management and development of a regional transmission system was further encouraged by FERC's issuance of Order 2000. This effort called for voluntary creation of regional transmission organizations throughout the United States. This order contemplates the regional control and perhaps the regional ownership of all transmission facilities. The elimination of discriminatory practices of transmission owners, enhanced management of increased demands placed on the existing transmission system and the development of a fully competitive wholesale market were among the driving forces for issuance of this order.

The development of regional transmission organizations provides the potential to increase the planning and operating efficiency of transmission systems. Proponents hope that transmission pricing, reduced congestion and electric path flow problems, more competitive markets and improvement of reliability management can occur when these entities are operating.

FERC feels that RTOs have the ability to eliminate discriminatory practices because they are completely independent from the production and sales of electricity. This independence will allow the measurement of available transmission capacity of the transmission system by having regional information that better describes and evaluates the transmission network.

FERC also thinks system reliability will be enhanced by providing access to region-wide information for use in the decision making process that will enhance the ability to better plan and operate the transmission network. As a result of better management of the transmission facilities, FERC believes that over the long run, generally favorable regional pricing of transmission services should occur. Better management should also result in identification of potential congestion and allow for planning and implementation of facility construction and upgrades that will eliminate those problems.

Implementation of Order 2000 has begun. RTO filings have been submitted by a number of proposed RTOs including the Southwest

Power Pool. The size and ownership structure of an RTO were not enumerated in Order 2000.

Four characteristics for RTO formation were identified as essential. The RTO must have independence from market participants. It must have appropriate size and scope to provide adequate regional coverage. It must have operational authority for all transmission facilities under its control and finally, the RTO has to have independent authority to file changes to its transmission tariff to maintain reliability.

Regional RTO Order

FERC continues to be concerned about the formation of adequate RTOs for the United States. In July 2001, FERC issued orders to a number of entities that had submitted RTO filings pursuant to Order 2000 to examine the development of large RTOs. The suggested configuration would contemplate establishment of an RTO in each of four quadrants of the United States. In separate orders issued concurrently, the FERC concluded that it is necessary to enter into mediation to facilitate the creation of large RTOs and it ordered discussions in the Northeast and Southeast.

FERC's concern with the RTO filings received in response to Order 2000 focused on the Commission's desire to develop transmission organizations that encompass the natural market for bulk power. To develop this concept, FERC suggested a single RTO for the Northeast, one for the Southeast, one for the Midwest and one for the West.

As Commissioner Massey opined in his concurring opinion for the Southeast mediation, "Interconnection standardization is good for the market. Generators should make location decisions based on economics, not on the basis of a patchwork of idiosyncratic interconnection standards. Establishing uniform standards will be good for generation investment and good for consumers.… This action is needed if we hope to get RTOs that are consistent with the standards and goals of Order No. 2000 in place in the near future…" (See concurring opinion of William Massey to Order Initiating Mediation, Docket No. RT01-100-000 July 12, 2001)

Final action on establishment of large RTOs is still under consideration. FERC continues to express concern about the urgency of establishment of large regional RTOs and has requested additional input from state utility commissions,

proposed RTOs and other interested parties. The Oklahoma Corporation Commission is a participant in a filing by Midwest State Commissions to respond to that request.

Chapter 6 Interim Study Findings

The Electric Restructuring Advisory Committee's responsibility to study transmission issues is clearly identified in Section 4 of Senate Bill 440. Two areas of study, the status of Oklahoma's electrical transmission system and the Southwest Power Pool's EHV study, are specifically enumerated for action by the Advisory Committee. The Advisory Committee held six meetings during the last 5 months that concentrated on transmission issues. This interim report constitutes the Advisory Committee's fulfillment of the statutory directive to submit a report relating to transmission issues by December 31, 2001.

It is difficult to separate individual issues like transmission from the overall subject of electric restructuring. Electric restructuring issues are complex and mingled. The Advisory Committee has utilized these meetings to develop a clearer understanding of the electric industry and how transmission is related to the overall issue of electric restructuring.

Oklahoma consumers must be afforded the best .opportunities available. Advisory Committee members and participants have characterized the following areas of concern about electric restructuring as significant issues:

Price of Electricity
- Maintaining low prices
- Benefits to all customers
- Effect of pricing on development of competition

New Generation Plant Construction
- Availability of electricity for Oklahoma customers
- Impact on usage by Oklahoma customers (conservation)
- Availability of fuel sources (natural gas infrastructure)
- Impact on reliability for Oklahoma customers and others in the region

Economic Development

- New business development and increased load
- New jobs and increased tax base

These issues, along with a myriad of other concerns, will be the subject of individual and group analysis as the Advisory Committee continues its study process in 2002.

1. Unsettled Status of Transmission Issues

It is clear that transmission facilities in Oklahoma and virtually every other state will likely require expansion and upgrades to meet ongoing reliability requirements and the future wholesale and retail electricity transportation needs of a changing electric industry. How to accommodate the changes taking place in the electric industry, especially the provision of transmission services, is the subject of discussion, rulemaking and litigation in a variety of forums.

The uncertainty of the future of electric transmission expansion, operation and regulation creates a major obstacle in proposing any definitive solution or solutions at the state level. Uncertainty exists in cases pending at the United States Supreme Court, in legislative initiatives pending in the United States Congress, and in the rulemaking and implementation process at the Federal Energy Regulatory Commission.

United States Supreme Court Case

The Federal Energy Regulatory Commission's regulatory authority is the subject of at least two cases pending in the United States Supreme Court. These cases question: 1) whether the provisions of Section 201 of the Federal Power Act, 16 U.S.C. 824, authorize the FERC to exercise jurisdiction over the service of transmitting in interstate commerce electric energy that is sold at retail, where the transmission service is "unbundled" from the sate-regulated retail sale of energy and the retail customer has the ability t choose a preferred power supplier (the New York case); and 2) whether the FERC's determination that it lacks jurisdiction over retail transmission service that is sold together with electric energy in a single "bundled" transaction between a public utility and its retail customer, where the retail customer cannot choose a preferred power supplier, is correct (the Enron case). Until these issues are resolved, FERC's regulatory mandates create uncertainty

about the future regulation, upgrade and operation of electric transmission systems in Oklahoma and the rest of the country.

United States Congress

For several years, the United States Congress has discussed adoption of changes to current law intended to enhance the orderly development of a competitive electric industry. Key members of the House and Senate have proposed legislative solutions that they feel provide clarity and direction for federal and state entities.

HR 3406 introduced by Congressman Joe Barton and S 1766 introduced by Senator Tom Daschle and Senator Jeff Bingaman are examples of legislation that continue to generate a great deal of discussion and uncertainty about how electric issues will be regulated in the future. Action on these measures appears to be delayed until at least 2002.

While HR 3406 and S 1766 have a number of provisions that are similar, the bills differ on several important elements that will impact the future of the electric industry. The likelihood of enactment of such federal legislation in 2002 adds additional uncertainty about the future of electric transmission regulation.

Federal Energy Regulatory Commission

FERC continues its effort to develop large regional transmission organizations (RTOs) in an effort to enhance the movement of electricity across and between regions of the country and encourage the expansion and development of a reliable and safe transmission network. FERC is seeking presently input from interested parties, including the states, as to how independent transmission entities could best ensure truly non-discriminatory transmission service and provide the level of confidence in the market that would support capital investment in additional generation and demand side projects for a safe, reliable and competitive marketplace.

No definitive approach has been approved or implemented. The delay in approval of a large regional RTO adds additional uncertainty to the future operation, expansion and development of a transmission system for a competitive wholesale market.

FINDING

A viable competitive wholesale electricity market can only be achieved when the generation and transmission infrastructure is in place to support competitive activities. It is imperative that we know how the structure and framework of a transmission "master plan" for movement of electricity within and without the state of Oklahoma is to be designed and how it is to be implemented before we can properly develop Oklahoma's approach and involvement. Oklahoma must actively participate in proceedings at federal and regional levels and conduct its own studies to determine the possible impact of changes to the transmission system. The Advisory Committee should continue to examine the need for improvements to Oklahoma's transmission system, the economic impacts of such improvements on Oklahoma and its consumers, and the appropriate policies which should be established to ensure that the planning for and implementation of transmission improvements are made on a timely basis.

It is important to note that the transmission system improvements addressed by the SPP EHVB study are primarily for reliability purposes and would be required whether or not Oklahoma's retail generation market is deregulated and whether or not additional new IPP projects are constructed in Oklahoma. Accordingly, while the SPP study provides useful information on the need for transmission improvements to address reliability concerns, it does not address the likely effects of implementing retail competition on the Oklahoma transmission system, nor does it address the important issue of whether new transmission lines are needed to enhance the efficiency of Oklahoma's wholesale generation markets. Because the primary function of SPP is to coordinate planning and operation of the transmission system for reliability purposes, the Advisory Committee is likely to have to rely on other entities to conduct the technical studies that are necessary to ass the potential need for and costs and benefits of improvements to the Oklahoma transmission system for commercial (rather than reliability) purposes.

The Advisory Committee should continue to study the issue of the need for transmission additions for commercial purposes since efficient wholesale power markets require efficient transmission systems. Policies which encourage increased efficiency and competition in Oklahoma's wholesale generation market will benefit Oklahoma's economy and consumers, even if retail competition is not implemented in Oklahoma.

The massive investment already occurring in our state to construct new generating facilities may ultimately benefit all citizens of our state. However, consideration must be given to

investment needed to maintain and improve the transmission system.

Increased tax revenues to fund public education, new jobs and increased income for our citizens, increased used of natural resources like natural gas, and the availability of additional sources of electric energy for rising demands are just a few examples of benefits that could occur as a result of the changing electric industry. Transmission enhancements, however, must be planned, approved and constructed in a regulatory framework that is clear and provides for equitable sharing of the costs and benefits of such enhancements between the transmission owners, users and electric consumers.

The uncertainties of the future of transmission services underscore the need for thorough review and analysis of the best way to promote Oklahoma's interests. Before any plan for retail restructuring can be reasonably assessed, the structure and operation of the regional wholesale market must be understood and evaluated. If the regional market is not effectively operating, then it is questionable whether any plan devised for retail restructuring in Oklahoma could be successful. Oklahoma's role in planning the transmission system, especially additions and expansions, will affect transmission pricing and how the state will benefit from the transmission grid.

2. Activities in Multiple Forums Require Heightened State Involvement and Awareness

As mentioned in the discussion of the unsettled status of transmission issues facing the electric industry, a variety of different forums currently have active agendas or proceedings that may define the future of management and regulation of the transmission system and resolve a multitude of other electric restructuring issues. These activities, occurring at federal, state and regional levels, provide opportunities for discussion and involvement that will shape the direction of the electric industry.

The involvement of state agencies and commission, local governmental entities, and electric industry participants including electric providers and non-utility generators is essential to the orderly development of a competitive market place Oklahoma's electric wholesale and retail competitive market place must provide benefits to Oklahoma consumers, Oklahoma businesses and Oklahoma governmental subdivisions.

Federal Energy Regulatory Commission Activities

FERC presently has numerous proceedings **pending on transmission** issues that allow participation through full intervention or limited intervention for purposes of just monitoring proceedings. Information about such cases is available on FERC's website, www.ferc.gov/electric.htm. The Oklahoma Corporation Commission is participating in many different FERC proceedings, including the following:

First, FERC has stated it intends to coordinate State-Federal Regional Panels in connection with current FERC RTO dockets. On November 9, 2001, FERC issued a letter to state commissions to provide the opportunity state officials to address issues regarding RTO formation.

Second, FERC has instituted proceedings to develop reasonable and uniform standards for interconnection to the transmission system. These rulemakings provide interested parties the ability to help shape the mechanisms that will be used by new generation facilities and loads in the future.

Third, FERC has created a rulemaking procedure to establish standards of conduct for transmission providers. Affiliate relationships will be clearly defined by these rules. In addition the rulemaking suggests a clear separation of transmission functions from all sales functions. These proposed standards are intended to deter anticompetitive behavior on the part of transmission owners and operators.

United States Congress

The House of Representatives and the United States Senate have spent a great deal of time over the last 4 years developing legislation related to electric restructuring issues. The direction the legislative agenda has taken during that time has changed but it now appears that some areas of agreement on how to deal with electric issues are contained in current bills pending in the House and Senate.

A call for enactment of a national energy policy prompted the development of a legislative package in the early part of this year. HR 4 was adopted by the House of Representatives in August but contained no definitive language on electric issues. The bill is pending in the United States Senate.

During the summer months both the Chairman of the Senate Energy and Natural Resources and the Chairman of the Energy and Air

Quality Subcommittee of the House Energy and Commerce Committee provided draft proposals dealing with electric issues. Two new bills, HR 3406 and S 1766, specifically address electric restructuring issues.

Hearings by the House Subcommittee have already been conducted and additional hearings are anticipated in the early part of 2002. The Senate bill is a comprehensive energy bill that contains electric proposals similar to the House bill. Action on this legislation is also expected early in 2002.

National Organizations

National organizations that provide monitoring and oversight on critical issues involving electric restructuring and transmission are numerous. The National Governors' Association, the National Conference of State Legislatures, the American Legislative Exchange Conference, the National Association of Attorneys General, the National Association of State Utility Consumer Advocates and the National Association of Regulatory Utility Commissioners are examples of special interest groups that are involved in issues management. They are all actively involved in issue monitoring, providing input to congressional committees and federal agencies, and development of opinions and positions on issues that impact their organizations and membership. Consumer advocacy groups involved in the process include the American Association of Retired Persons, Common Cause, and the Consumer Federation of America.

Trade organizations like the Energy Power Supply Association, the Edison Electric Institute, Electric Consumers Resource Council, the National Association of Rural Electric Cooperatives, and the National Association of Energy Marketers provide members monitoring and information on electric restructuring issues that impact their business interests. These organizations provide valuable information to their membership and often participate in hearings or dockets to represent the interests of their membership.

Oklahoma Corporation Commission

Concurrent proceedings often occur at the state and federal levels when the issues are of particular interest both to the state and to the affected interstate region. Examples of such proceedings include reviews of utility mergers, corporate reorganizations, reliability concerns, reviews of market power and methodology for determining market power. The Oklahoma Corporation Commission not only conducts hearings on such

issues, but also intervenes or files comments on behalf of the State of Oklahoma in hearings by federal agencies. As noted above, the Commission is often active in FERC proceedings. The Commission also participates in proceedings conducted by the Securities Exchange commission, and provides testimony before Congress. The Commission also remains active in matters involving national energy-related groups such as the North American Electric Reliability Council.

Finding

Participating in active agendas and proceedings underway in the various forums interested in legislative and regulatory changes for the electric industry is extremely important. These activities provide members of organizations information that allow interested parties to understand the issues and proposed solutions, and evaluate the impact of various proposals on Oklahoma and its electric consumers. The Oklahoma Legislature, Oklahoma agencies and officials, and electric industry participants have a responsibility to identify and participate in legislative, regulatory and legal matters that could impact Oklahoma's transmission system management and control. National organizations provide current and accurate information for members that will aid in shaping opinions and suggestions that individual members might want to offer.

The Oklahoma Corporation Commission and the Office of the Attorney General have a history of intervention in matters involving electric companies doing business in this state. The Oklahoma Corporation Commission also participates in regulatory actions conducted by federal agencies. The Corporation Commission is presently an intervenor in a number of causes before FERC related to electric restructuring. In addition, the commissioners regularly provide testimony before Congress on electric restructuring. The Attorney General and the Commission should be supported in their continuing efforts to protect Oklahoma interests.

The importance of transmission system issues requires the heightened participation by the Attorney General and the Corporation Commission, particularly in proceedings involving the development of regional transmission organizations at the Federal Energy Regulatory Commission. The Attorney General's and the corporation Commission's existing statutory authority is broad enough to allow such heightened participation at both the state and federal level Intervention and monitoring of legislative and regulatory activities currently under way in

the Congress and at FERC should be a major undertaking of the Attorney General and the Oklahoma Corporation Commission. Such endeavors, undertaken by the Attorney General and the OCC to protect and advance the interest of the State and its consumers at the national level, should be supported and properly funded by the Legislature.

The Oklahoma Legislature should encourage the development of a special committee of the National Conference of State Legislatures to monitor activities at the Federal Energy Regulatory Commission and the United States Congress involving transmission and other restructuring policies. The regulatory actions of FERC and the proposed legislative activities of Congress require every state to become informed and actively participate in these national activities.

The Governor of Oklahoma, the Superintendent of Public Instruction and the Tax Commission should encourage national organizations in which they are involved, such as the National Governors' Association and other national organizations, to actively participate in the development of policies involving transmission and other electric restructuring issues, where appropriate. These organizations provide additional forums for monitoring these issues. Their involvement will provide members a better understanding of the issues and provide another forum that will allow suggestions to shape the decision making process that are in the best interest of consumers and states like Oklahoma.

Electric industry participants in Oklahoma have been involved in their trade organization activities and should be encouraged to continue to participate in the dialog that is currently underway. The development of legislation, rules and regulations that create a viable and effective wholesale and retail market are issues that require their continued attention and involvement.

3. Alternatives To The Management And Development Of Our Transmission Systems Should Be Explored

A fundamental issue that must be resolved is who will ultimately manage and control the planning, upgrade and operation of transmission systems. FERC's RTO recommendations provide some definition on this matter but a number of other concerns remain. RTOs can be for-profit or not-for-profit organizations with independent transmission companies or transmission companies as

members. Other alternatives are also being discussed. How the management structure will finally be organized is still to be determined but Oklahoma must be in a position to influence the debate on these issues to serve the interest of Oklahoma and to act when those matters are completed.

A number of alternatives have been presented to the Advisory Committee during the hearings. Achieving the goals of development of a transmission system that can host a robust electric energy market and provide nondiscriminatory access to all users are essential to creation of a competitive wholesale and retail electricity market. These proposals present mechanisms that provide different management approaches.

MESO Proposal

The Municipal Electric Systems of Oklahoma, a state power association, presented a brief analysis of options that might be available to Oklahoma in the future. The presentation has been posted on the web site, www.resturctureok.net, to support the Advisory Committee. All presentations on the web site can be downloaded.

The options offered in this analysis offered several alternative approaches including staying with the existing system, development of a TRANSCO/GRIDCO (a for-profit investor-owned company) or government acquisition of all transmission facilities in the state.

TRANSLink Concept

Southwestern Public Service Company, a subsidiary of Xcel Energy, provided the Advisory Committee information concerning an independent for-profit transmission company, TRANSLink, LLC, that owns, manages, operates, and maintains transmission systems on behalf of itself and others. The presentation has been posted on the web site, www.resturctureok.net, to support the Advisory Committee. All presentations on the web site can be downloaded.

TRANSLink's current participants include investor-owned utilities, an electric cooperative, a public power district and a municipal electric system with almost 30,000 miles of transmission lines that serve almost 7 million customers. It provides a management organization that will be based on corporate control and will participate in the RTO formed for the region while remaining responsible to local oversight and TRANSLink shareholders.

Solomon Smith Barney Presentation

Solomon Smith Barney provided the Advisory Committee an overview of electric restructuring with an emphasis on transmission issues. The presentation has been posted on the web site, www.resturctureok.net, to support the Advisory Committee. All presentations on the web site can be downloaded.

SSMB suggested that the creation of a public power agency that would own all transmission assets in Oklahoma should be considered. Since public power agencies are not currently subject to regulatory oversight, these agencies may be able to form their own regional transmission network. According to SSMB, financing could be accomplished through the sale of municipal bonds thereby lowering the cost impact of transmission additions on customer bills. It is interesting to note that Energetix provided the Advisory Committee a public funding methodology to finance transmission expansion and construction that was similar to the SSMB concept.

Finding

The Advisory Committee's limited exposure to alternative approaches available for management of the transmission network and for financing potential upgrades and expansion of transmission facilities in Oklahoma and the region suggests the need for further in-depth study to determine the feasibility of such proposals. The potential tax consequences associated with these proposals is also of great concern.

The proposals presented at the meetings provide some insight into the potential of various alternatives, but having a better understanding of these options, and other options that might be available, as well as the tax ramifications associated with each option, is essential to being prepared to recommend the approach Oklahoma should take as issues are dealt with in the courts, in Congress and at the Federal Energy Regulatory Commission.

There is a continuing urgency to be prepared to act to influence the debate and resolution of transmission policies that will impact Oklahoma in the future.

4. Creation of Oklahoma Transmission Initiative

Policies involving transmission of electricity are evolving Transmission systems were originally constructed by the electric provider to deliver electricity from their own generation plants to their retail customers. But increased competition, the advent of non-utility owned generating facilities, and the need to transport electricity produced at those plants to wholesale and retail customers has dramatically increased the challenges of planning, operation and regulation of transmission facilities.

In 1998, following the enactment of the Electric Restructuring Act of 1997, a report was filed with the Legislature that provided findings about Oklahoma's transmission future. In that document, the consensus of opinion was expressed that Oklahoma would likely benefit from participation in regional transmission development and management rather than developing an "Oklahoma-only" approach. It is clear that FERC also prefers a regional approach.

Whether the ultimate control of this issue will remain with the Federal Energy Regulatory Commission is yet to be determined. There are, however, issues that have historically been managed at the state level and will probably continue to be addressed by state government. For example, siting of transmission facilities and the use of eminent domain to acquire rights-of way for construction of these systems has been and should remain an issue subject to state oversight and control.

As regional mechanisms are debated, states should actively participate so that regional policies involving transmission are equitable to individual states and their citizens. State legislatures in this region have had little or very limited joint discussion of the concepts, approaches and concerns that such regional approaches might have on their states. From taxes to environmental management issues, states will certainly be affected by a regional transmission management policy.

Interaction With Surrounding States To Clarify State Interests Related to Interstate Transmission Issues

Oklahoma is often affected by the legislative and regulatory actions taken by surrounding states. For example, environmental degradation such as water pollution or air pollution can be created in Oklahoma by actions or inactions of legislatures or regulatory authorities in other states. Some state agencies communicate with their counterparts in other states or respond to questions that might be raised. Committees of the Oklahoma Legislature have had some contact with their corresponding committees in other states but this is not a normal practice.

Possible Creation of Interstate Compact or Regional Approach

Interstate Compacts or some other regional approach allow states to discuss issues and manage resources that they share in common. An interstate compact is only available after a Congressional authorization of its purpose and mission.

Interstate Compacts, for example, are in place for a number of different purposes. Interstate compacts have been authorized for management of environmental wastes, for water quality and water use, for management of oil and gas interests, and for other purposes. Regional electric issues may be another area where an interstate compact could provide benefits for participating states.

Finding

Oklahoma and the states surrounding our state should be involved in continuous discussions about how to best influence evolving policies regarding generation and transmission of electricity to provide maximum benefits for customers, businesses and governments of all states. Issues and policies related to regional planning and control of transmission will impact each state in different ways. Active participation by Oklahoma and neighboring states will be required to ensure that the short-term and long-term consequences of policies involving regional transmission organization development equitably account for individual state concerns. Discussions between legislators, regulatory commissioners, governors, attorneys general and other state agencies should be commenced immediately.

The formation of an interstate compact or some other regional approach that provides a mechanism or organization to promote comity between the states, encourages maintenance of the transmission grid, and facilitates cooperation between regulatory agencies of the affected states may require federal authorization. A dialog led by Oklahoma legislators with other states in the region, however, could aid in the development of the case to provide a regional approach states might consider to deal with common issues. The Legislature should begin the process by opening discussions with Legislatures in Arkansas, Missouri, Kansas, Colorado, Louisiana, Texas and New Mexico about generation and transmission issues that are common to each state.

The Governor, Corporation Commission, Attorney General, Tax Commission, and the Superintendent of Public Instruction

should also begin discussions with their counterparts in those states for the same purpose.

By the end of 2002, data should be available to determine the propriety of establishment of an interstate compact or some other regional approach to facilitate dialogue and decisions on electric generation and transmission issues. Should the data support the establishment of an interstate compact or some other regional approach, the Legislature should enact a resolution requesting action to create the compact or other regional organization. Such an interstate compact or other regional organization would be designed to fully support the efforts of other state agencies and officials acting on behalf of the State of Oklahoma, in matters before the FERC and the Congress, and not to hinder, frustrate or undercut such activities. And, while the interstate compact or other regional organization may actively participate in interstate planning, it would not act in an advocacy role.

Definitions

Ancillary Services: Necessary services that must be provided in the generation and delivery of electricity. As defined by the Federal Energy Regulatory Commission, they include: coordination and scheduling services (load following, energy imbalance service, control of transmission congestion); automatic generation control (load frequency control and the economic dispatch of plants); contractual agreements (loss compensation service); and support of system integrity and security (reactive power, or spinning and operating reserves).

Bundled Utility Service: All generation, transmission, and distribution services provided by one entity for a single charge. This would include ancillary services and retail services.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequential use of energy," and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC). (See the Code of Federal Regulations, Title 18, Part 292.)

Congestion: A condition that occurs on the transmission system when insufficient transfer capacity is available to implement all of the preferred schedules for electricity transmission simultaneously.

Distribution: The delivery of electricity to retail customers (including homes, businesses, etc.).

Electric Service Provider: An entity that provides electric service to a retail or end-use customer.

EPACT: The Energy Policy Act of 1992 addresses a wide variety of energy issues. The legislation creates a new class of power generators, exempt wholesale generators, that are exempt from the provisions of the Public Holding Company Act of 1935 and grants the authority to the Federal Energy Regulatory Commission to order and condition access by eligible parties to the interconnected transmission grid.

Exempt Wholesale Generator (EWG): Created under the 1992 Energy Policy Act, these wholesale generators are exempt from certain financial and legal restrictions stipulated in the Public Utilities Holding Company Act of 1935.

FERC: The Federal Energy Regulatory Commission.

Generating Unit: Any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.

Generation (Electricity): The process of producing electric energy by transforming other forms of energy; also, the amount of electric energy produced, expressed in watthours (Wh).

Independent Power Producers (IPPs): Entities that are also considered nonutility power producers in the United States. These facilities are wholesale electricity producers that operate within the franchised service territories of host utilities and are usually authorized to sell at market-based rates. Unlike traditional electric utilities, Independent Power Producers (often also called an EWG) do not possess transmission facilities or sell electricity in the retail market.

Independent System Operators: An independent, Federally-regulated entity that coordinates regional transmission in a non-discriminatory manner and ensures the safety and reliability of the electric system.

Investor-Owned Utility: A class of utility whose stock is publicly traded and which is organized as a tax-paying business, usually financed by the sale of securities in the capital market. It is regulated and authorized to achieve an allowed rate of return.

Kilowatt (kW): One thousand watts.
Kilowatt-hour (kWh): One thousand watthours.

Megawatt (MW): One million watts.

Megawatt-hour (MWh): One million watthours.

Open Access: A regulatory mandate to allow others to use a utility's transmission facilities to move bulk power from one point to another on a nondiscriminatory basis for a cost-based fee.

Power Pool: An association of two or more interconnected electric systems having an agreement to coordinate operations and planning for improved reliability and efficiencies.

PURPA: The Public Utility Regulatory Policies Act of 1978, passed by the U.S. Congress. This statute requires States to implement utility conservation programs and create special markets for co-generators and small producers who meet certain standards, including the requirement that States set the prices and quantities of power the utilities must buy from such facilities.

Qualifying Facility (QF): A cogeneration or small power production facility that meets certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC) pursuant to the Public Utility Regulatory Policies Act (PURPA).

Rate Base: The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash, working capital, materials and supplies, and deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.

Ratemaking Authority: A utility commission's legal authority to fix, modify, approve, or disapprove rates, as determined by the powers given the commission by a State or Federal legislature.

Regional Transmission Organization (RTO): A utility industry concept that the Federal Energy Regulatory Commission embraced for the certification of voluntary groups that would be responsible for transmission planning and use on a regional basis.

Regulation: The governmental function of controlling or directing economic entities through the process of rulemaking and adjudication.

Reliability: Electric system reliability has two components--adequacy and security. Adequacy is the ability of the

electric system to supply to aggregate electrical demand and energy requirements of the customers at all times, taking into account scheduled and unscheduled outages of system facilities. Security is the ability of the electric system to withstand sudden disturbances, such as electric short circuits or unanticipated loss of system facilities. The degree of reliability may be measured by the frequency, duration, and magnitude of adverse effects on consumer services.

Renewable Resources: Naturally, but flow-limited resources that can be replenished. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Some (such as geothermal and biomass) may be stock-limited in that stocks are depleted by use, but on a time scale of decades, or perhaps centuries, they can probably be replenished. Renewable energy resources include: biomass, hydro, geothermal, solar and wind. In the future, they could also include the use of ocean thermal, wave, and tidal action technologies. Utility renewable resource applications include bulk electricity generation, on-site electricity generation, distributed electricity generation, non-grid-connected generation, and demand-reduction (energy efficiency) technologies.

Restructuring: The process of replacing a monopoly system of electric utilities with competing sellers, allowing individual retail customers to choose their electricity supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of the vertically-integrated electric utility.

Retail: Sales covering electrical energy supplied for residential, commercial, and industrial end-use purposes. Other small classes, such as agriculture and street lighting, also are included in this category.

Transmission: The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to consumers, or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.

Transmission System (Electric): An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for

delivery over the distribution system lines to consumers, or is delivered to other electric systems.

Unbundling: The separating of the total process of electric power service from generation to metering into its component parts for the purpose of separate pricing or service offerings.

Wholesale Competition: A system whereby a distributor of power would have the option to buy its power from a variety of power producers, and the power producers would be able to compete to sell their power to a variety of distribution companies.

Wholesale Market. A wholesale market represents the sum of purchases and sales of energy and capacity for resale along with ancillary services needed to maintain reliability and power quality at the transmission level. A party that purchases energy, capacity, or ancillary services in the wholesale market to serve its own load is considered to be a participant within the framework of rules generally devised by the ISOs or RTOs for coordinating transmission in conformity with approved standards.

Wholesale Sales: Energy supplied to resellers that might include other electric utilities, cooperatives, municipals, retail electric providers and Federal and State electric agencies for resale to ultimate consumers.

Wholesale Power Market: The purchase and sale of electricity from generators to resellers (who sell to retail customers), along with the ancillary services needed to maintain reliability and power quality at the transmission level.

Wholesale Transmission Services: The transmission of electric energy sold, or to be sold, at wholesale in interstate commerce (from EPACT).

Appendix A

Advisory Committee Member Issues

On November 6, 2001, Senator Kevin Easley sent the following message to all members of the Advisory Committee:

I want to thank each of you for your continued participation at the meetings of the Electric Restructuring Advisory Committee. I think we have received a great deal of valuable information that will be useful in preparing the interim report for the transmission issue.

An interim report is, as you know, due no later than December 31, 2001. In order to include all of the issues that are of concern to committee members, I ask that each of you provide me with suggested issues that should be included in the report. Please have those items to me no later than November 21. This will allow us the opportunity to get them organized so we can discuss them at our meeting scheduled for December 5. At this point in time, I suggest we identify elements you want included in the report and then we can expand those elements into report sections.

We want to include all of the issues that are of concern or that are supported by committee members. Please respond as quickly as possible. Thanks again for you help.

Kevin

Responses were received from a number of Advisory Committee members. Those responses appear on the following pages.

Response of Secretary of State Mike Hunter

November 21, 200l

Dear Senator Easley:

SB 440 requires the Advisory Committee to "prepare an interim report relating to transmission issues no later than December 31, 2001." In that regard, I have spent a good deal of time reviewing both my notes from presentations as well as the supplementary material we have received thus far. It seems to me that until FERC establishes the regional design for RTO's we cannot proceed to develop a coordinated, long range plan for moving electricity within and without the state of Oklahoma. In order for a transmission "master plan" to ensure that the massive expenditures of transmission capital will have their intended salutary impact within Oklahoma, we should be assured that concommitant grid upgrades will occur outside our state's boundaries. Until an authority is established empowered to choreograph and mandate this interstate coordination, I fear our efforts are largely premature.

Under current law, upgrades and improvements are made to transmission lines within the state on an "as necessary" basis. Although potential congestion spots or system restraints within the state have been identified, it does not appear that near term system wide capital outlays intrastate are required to ensure current and foreseeable system loads.

Interconnection costs triggered by new generating facilities are an issue that should be addressed by the Advisory Committee. Although it can be argued that such costs are properly the responsibility of a new concern, incorporated into the planning and financing of same, it can be also be postulated that a economic benefit test should be administered to determine an " Oklahoma public good" quotient for same.

Finally, clear jurisdictional lines between the Oklahoma Corporation Commission and any future RTO need to be established to ensure that transmission issues are resolved in an orderly and conclusive manner. To ensure that this new regulatory paradigm will be consonant with Oklahoma's needs and concerns, our state should take an active role in proceedings before FERC on these issues. In that regard, the state should task the OCC and the Attorney General with the statutory authority and proper funding to

protect and advance the interests of the state before FERC in proceedings that relate to transmission regulation. In my opinion this is the single most effective step we can take to ensure the development of a retail marketplace for electricity.

Sincerely,

Mike Hunter
Secretary of State

Comments of Representative John Wright, Oklahoma House of Representatives

-----Original Message-----

From: John A. Wright

Sent: Monday, November 26, 2001 8:58 AM

To: rogers@lsb.state.ok.us

Subject: Electric Advisory Committee Issue List

Chairman Easley,

The issues that I believe should be given further consideration are:

Should it be under the jurisdiction of this committee to recommend a refashioning of the Electric distribution grid to accommodate transmission transfer growth instead of the current physical construction of the grid which is to serve native load, provide for reliable service and generation backup.

If that determination is made than any action resulting in higher rates for consumers or lower profits for utilities may only be prudent after the final determination of the RTO placement of the State of Oklahoma to avoid wasted capitol investment.

Has NERC established guidelines for "transmission transfer growth" as projected and already tested in areas of the country where deregulation has established models for anticipated bulk electric transfers.

Since the SPP non-coincidental peak load statistics indicate a doubling of power usage from the lowest power usage to the highest during the year one could surmise that the transmission adequacy during large portions of the year is more than adequate even to accommodate transmission transfer growth; however the greatest pressures on price and hence the need for market transfer capabilities would occur during the peak season how much excess capacity is necessary in order to facilitate bulk transfer during the 3-4 months of peak demand ?

Once the RTO is established the wholesale power market serves as the best indicator of determining if Oklahoma is in a position of having excess supply over demand and hence would be the best barometer to evaluate the likelihood of stable or rising prices if the retail market is deregulated.

Would the benefit of transmission upgrade costs be offset by potential savings facilitated by increased electric exchange opportunities ? Only likely to be projected after RTO is set.

What are the expansion opportunities of the transmission grid on existing right-of-way ? Can the transmission tariffs be set (requested) at a level that enables Independent power generators to export power and a reasonable amortization of capitol improvement costs over an appropriate useful life of those upgrades proportionate to the rates charged for "wheeling" the power.

Once the RTO is formed Oklahoma can then evaluate based on generation assets within the RTO what stranded costs of Nuclear facilities within the RTO Oklahoma consumers are likely to help pick up the tab for based on market clearing pricing that functions in a restructured market. The

market then consisting of not State borders but RTO borders.

State Representative

John A. Wright

Comments of Jerry Johnson, Vice-Chairman, Oklahoma Tax Commission-December 10, 2001

Following are my comments related to the interim report of the Electric Restructuring Advisory Committee. I apologize for the lateness of my response. I hope that this is helpful in the preparation of the report and I look forward to providing additional comments on the draft document.

I concur with the comments submitted by other members concerning the necessity for delaying any significant transmission upgrades until the RTO issue is resolved. Also, the nature of the transmission system will preclude Oklahoma from making transmission upgrade decisions in isolation. While the current situation makes it difficult for transmission upgrade decisions to be made at this time, it is imperative that Oklahoma establish a process through which future investment decisions can be made in a rational and coordinated fashion.

Given this uncertainty regarding the creation of the RTO's and other federal issues, I would offer the following as items to be considered in the interim report.

1) I concur with the suggestion submitted by other members that Oklahoma needs representation before FERC as transmission coordination decisions are made.

2) Just as it is premature to make specific upgrade decisions at this time, decisions regarding the process that Oklahoma should utilize for approving transmission investments should also be made after a regulatory framework is in place. However, it is important that once this regional structure is in place that Oklahoma be in a position to act quickly if changes to the current system are necessary. I would be interested in knowing if there are any additional alternatives for transmission management in addition to those identified in the draft outline (OMPA Proposal and Translink Concept). All of the options will need to be reviewed in the context of the ultimate FERC rulings on transmission.

3) The committee has heard various proposals regarding alternatives for funding transmission upgrades. These alternatives should be outlined in the report and the committee should further explore the feasibility of these options. Specifically, the committee should spend additional time evaluating the possibility of issuing revenue bonds which are to be repaid through increased state revenue collections.

Sincerely,

Jerry Johnson
Oklahoma Tax Commission

Comments submitted by Commissioner Denise Bode, Chair,
Oklahoma Corporation Commission

November 21, 2001

Honorable Kevin Easley
Room 417-C, State Capitol
Oklahoma City, OK

Re: Electric Restructuring Advisory Committee Report Issues

Dear Senator Easley:

In response to your request for a list of suggested issues to be included in the interim report of the Committee, I have identified those areas that are of greatest concern to me.

First and foremost, I believe it is imperative that we know what the RTO structure and framework is going to look like. Currently, the FERC has not identified that structure and until a fully functional RTO is in place there are too many unknowns to finalize a responsible plan.

We must identify regional issues and constraints to effectively create a plan of action for Oklahoma. While a state study has been conducted, further research regarding regional issues is crucial. Our neighbor, Arkansas, has recently conducted such a regional study. However, the conclusion of their study recommended that the implementation date of retail open access be delayed until October 2004 and the restructuring legislation be either repealed or amended.

I regret that I personally will be unable to attend the December 5 meeting of the Advisory Committee. I am chairman of the Oklahoma Rhodes Scholarship Committee and we will be conducting student interviews that day. If you have any questions, I would be happy to discuss any of these concerns with you.

Sincerely,

Denise A. Bode
Chairman
Oklahoma Corporation Commission

November 30, 2001

Honorable Kevin Easley
Room 417-C, State Capitol
Oklahoma City, OK

Re: Electric Restructuring Advisory Committee Issues List

Dear Senator Easley:

My earlier letter of November 21, 2001 highlighted those areas of which I thought should be addressed in the interim report of the committee. At this time, I am providing you with more specific questions surrounding those earlier identified issues that I feel the report should be responsive to, thus making a complete record.

It is my hope that this listing will assist you in identifying the issues that will impact Oklahoma.

Oklahoma's goals for restructuring.

In preparing this report it is important that the goals envisioned for Oklahoma's restructuring be clearly delineated. What does Oklahoma stand to gain by restructuring?

- Will it protect Oklahoma's low prices?
- Will it lower electric prices for all classes of customers?
- Will it introduce competition into Oklahoma markets?
- Will native load customers be favored or protected?
- Will it enhance reliability for Oklahoma consumers or others within the Midwest region?
- Will it reduce regulation and thus lower regulatory costs?
- Will it encourage conservation?
- Will it maximize the financial growth of generation providers, or protect the financial condition of utilities?
- Will it attract new generation providers to increase the amount of electricity sold to out-of-state purchasers?
- Will it attract new load to the state of Oklahoma?
- Will it create new jobs and increase the tax base for the Oklahoma economy?

These goals are sometimes conflicting. For instance, lowering prices in Oklahoma may not be the answer if the goal is to attract new generation providers. The objectives must be clearly articulated before the merits of any restructuring proposal can be logically analyzed.

Regional Restructuring and the Wholesale Market

Moreover, before any plan for retail restructuring can be reasonably assessed, the structure and operation of the regional wholesale market must be understood and evaluated. If the regional market is not effectively operating, then it is unlikely that any plan devised for retail restructuring in Oklahoma could be successful.

Similarly, there are many issues involved with properly operating and providing open market access to the regional transmission system. The FERC has proposed the Regional Transmission Organization (RTO) structure to address and resolve these issues. This process is ongoing; its completion date is unknown at this time. It may be premature for Oklahoma, without other compelling reasons, to undertake retail restructuring while these issues remain unresolved.

The report should address at least the following regional issues.

1. Determine whether transferring control of Oklahoma's transmission assets to a RTO or a Transco (for-profit RTO) is in the best interest of Oklahoma consumers and providers. (See La. PSC Order No. U-25965, ordering transmission-owning utilities to show cause why they should not be enjoined from transferring ownership or control to a Transco).
2. Determine the effect of transmission open access on transmission adequacy and reliability, and determine limitations on exports caused by transmission capacity. (See, Oak Ridge National Laboratory Report, Phase II dated November 6, 2001). This issue concerns the capability of the existing grid to handle market-based transactions, while maintaining system reliability. This also involves system planning and congestion management.
3. Determine how to build electric infrastructure without penalizing Oklahoma utilities or ratepayers. (See OG&E presentation to the Electric Restructuring Advisory Committee dated October 17, 2001, on Lee Paden's website, www.restructureok.net).
4. Determine the adequacy of natural gas infrastructure to meet the demands of increased gas-fired generation under open access.
5. Determine how the interests of native load customers are best served. Will native load customers continue to enjoy a favored position on the grid? Will they bear increased costs as a result of a change to a regional, postage stamp transmission rate?

6. Oklahoma has always had jurisdiction over the siting of transmission facilities within the state. Those issues will continue to be of primary interest to Oklahoma, although there is proposed federal legislation that would transfer such jurisdiction to the federal government. Oklahoma needs to review siting jurisdiction.

Participation in FERC proceedings

Many, if not most, transmission issues are within FERC's jurisdiction, although there is a national movement towards involving states in regional decision-making. Oklahoma's restructuring success depends in large part on cooperatively working with the FERC and other states in the region in addressing transmission issues (operational and market). The following proceedings have either been initiated or announced for a future date by FERC. I have asked the Commission to participate in such proceedings to have input into the resolution of the relevant issues.

1. Participate in FERC proceedings to develop reasonable uniform standards for and to address issues related to new generation attempting to connect to transmission facilities. Issues include standard terms and conditions, charges for interconnection, necessary upgrades, reactive power, voltage levels, metering requirements, etc. (See FERC's Advance Notice of Proposed Rulemaking for Standardizing Generator Interconnection Agreements and Procedures, RM 02-1-000 issued October 25, 2001. See also, FERC's web page on the rulemaking, www.ferc.gov/electric/gen_inter.htm)
2. Participate in FERC's State-Federal Regional Panels to address RTO issues. Last week, I personally sat in on a conference call with Chairman Wood of FERC. The panels are expected to address the set up of RTOs, transmission ratemaking, the use of demand-side response mechanisms in competitive markets, market monitoring and mitigation tools, and distributed generation issues. (Specific panels and relevant docket numbers to be disclosed in future notices from FERC). It is also expected that the state-federal panels will address reliability standards and reserve margin requirements, but if the panels do not address such issues they will have to be resolved in another forum.
3. Participate in FERC's rulemaking on Standards of Conduct for Transmission Providers. Issues are expected to include broader rules to cover all affiliate relationships – convergence, the sharing of confidential transportation information, gas and electric markets – and required separation of transmission functions from all sales functions, including bundled retail sales. (See, FERC

Notice of Proposed Rulemaking dated September 27, 2001, Docket No. RM01-10-000). It has generally been assumed that the RTOs would prohibit anticompetitive behavior, but that is questioned now.

Other Relevant Issues for Oklahoma

An additional area of concern for Oklahoma is the recent adoption by FERC of the Supply Market Assessment (SMA) screen. The test is designed to determine whether a supplier has market power in the generation market. FERC has traditionally applied a hub-and-spoke test to determine market power, but is now applying a more stringent test. Specifically related to Oklahoma, FERC has concluded that AEP (parent company of Public Service Company of Oklahoma) should be denied market-based rates, based on the results of the SMA screen indicating AEP has generation market power for the region in which it sells power. FERC explained that the market's peak demand cannot be met without AEP's generation and that transmission constraints prevent the movement of power from other areas within the region to compete with AEP. This more stringent market power test adopted by the FERC should be reviewed by Oklahoma to determine if it is appropriate for our use.

Warm regards,

Denise A. Bode
Chairman