

Exhibit No.:

Issues:

Description of Regional and
Western Resources
Transmission Facilities and
Operations; Post-merger
Transmission Utilization

Witness:

Richard A. Dixon

Sponsoring Party:

Western Resources, Inc. and
Kansas City Power & Light
Company

Type of Exhibit:

Direct Testimony

Case No.:

IN THE MATTER OF THE
MERGER APPLICATION OF
WESTERN RESOURCES, INC. AND
KANSAS CITY POWER & LIGHT COMPANY

DIRECT TESTIMONY
OF
RICHARD A. DIXON
WESTERN RESOURCES, INC.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

DIRECT TESTIMONY
OF
RICHARD A. DIXON
EXECUTIVE DIRECTOR
ELECTRIC TRANSMISSION SERVICES
WESTERN RESOURCES, INC.

CASE NO. _____

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Richard A. Dixon. My business address is P.O. Box 889, 818
South Kansas Avenue, Topeka, Kansas 66612.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am employed by Western Resources, Inc. ("Western Resources") as
Executive Director, Electric Transmission Services.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES IN THAT POSITION.

A. I am responsible for directing the planning, operating and commercial
activities related to Western Resources' transmission system.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
BUSINESS EXPERIENCE.**

A. I graduated from Kansas State University in 1971 with a Bachelor of Science
degree in Electrical Engineering. In 1972, I received a Master of Business
Administration degree from the same university. From 1972 until 1975, I was
employed by the Tennessee Valley Authority as a rate engineer.

1 I joined Western Resources in 1975 as Assistant Manager of Rates,
2 with major areas of responsibility in cost analysis for Western Resources'
3 electric and natural gas properties, rate design and administration, and rate
4 matters related to jurisdictional regulatory commissions. In 1979, I was
5 appointed Manager of Rates, and in 1985, I was promoted to Director, Rates
6 and Revenue Requirements. In 1990, I assumed responsibility for directing
7 Western Resources' interstate pipeline, wholesale electric sales, and electric
8 transmission activities before the Federal Energy Regulatory Commission.
9 In 1996, I was promoted to my current position.

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

11 A. The purpose of my testimony is to discuss Western Resources' transmission
12 operations and how those operations may be impacted by a merger with
13 Kansas City Power & Light Company ("KCPL").
14

15 **II. REGIONAL OVERVIEW**

16 **Q. PLEASE GIVE AN OVERVIEW OF THE TRANSMISSION SYSTEM IN THE**
17 **REGION.**

18 A. Western Resources' transmission system is interconnected directly or
19 indirectly with the other utilities in the Southwest Power Pool ("SPP"), one of
20 10 North American Electric Reliability Councils ("NERC"). SPP systems are
21 synchronized with the systems of other reliability councils in the Eastern
22 Interconnect, which are generally all of the utilities east of the Rocky

1 Mountains, except the Texas systems. The Eastern Interconnect is
2 connected to the Western Grid and to the Texas systems through
3 asynchronous direct current ties.

4 **Q. PLEASE GIVE AN OVERVIEW OF THE TYPE OF POWER**
5 **TRANSACTIONS AND POWER FLOWS THAT TEND TO OCCUR IN THE**
6 **REGION.**

7 A. "The region" is becoming increasingly difficult to define. Recent changes
8 under FERC Order No. 888 have greatly expanded power purchase and
9 sales opportunities by providing access to the entire national electricity grid
10 to qualified customers. In addition, evolving regional transmission groups
11 ("RTGs") have and will provide additional transaction possibilities. These
12 events have permitted Western Resources, and other participating utilities,
13 greatly expanded access to lower cost power and willing buyers - in other
14 words, enhanced competition. Today, it is not uncommon to see energy
15 transactions from the northern U.S. to the Gulf of Mexico or from California
16 to Florida. Two years ago those transactions were unheard of because of
17 the lack of access to transmission facilities. If access was obtainable, the
18 additive cost of transmitting energy over many adjoining systems made
19 transactions uneconomic.

20 Power flows within the SPP and between the SPP and adjacent NERC
21 reliability councils are very dependent on generation availability and fuel
22 prices. For example, when natural gas prices are high relative to the

1 delivered prices of coal, it becomes economic under certain load conditions
2 for utilities in the southern areas to purchase energy from northern utilities
3 as a substitute for more expensive gas-fired generation.

4 **Q. PLEASE DESCRIBE HOW AN RTG CAN AID TRANSMISSION ACCESS.**

5 A. Under Order No. 888, transmission access is required of all FERC
6 jurisdictional utilities (and of many non-jurisdictional utilities under the
7 Order's reciprocity provisions). However, access at uneconomical prices for
8 either the provider or the user may not be efficient. Most RTGs in existence
9 or being formed have adopted a regional pricing approach for transmission
10 owning members. There are many variations to these pricing methods but
11 two principles are common. First, the transmission providers are fairly
12 compensated for the use of their transmission facilities and second, the
13 transmission charges are generally lower than they would have been absent
14 the RTG. As a result, an RTG enhances transmission access. The Western
15 Resources/KCPL merger produces the same result, only on a smaller scale.

16
17 **III. IMPACT OF MERGER ON OPERATIONS**

18 **Q. PLEASE DESCRIBE WESTERN RESOURCES' ELECTRIC**
19 **TRANSMISSION SYSTEM.**

20 A. Western Resources and its interconnected wholly owned subsidiary KGE
21 own and operate approximately 6,300 miles of electric transmission lines, as
22 well as many interconnections with the systems of ten other utilities, thereby

1 permitting direct interchange transactions with other power suppliers in
2 Kansas, Missouri, Oklahoma, and Nebraska and indirect interchange
3 transactions through these adjoining utilities with many more utilities for
4 purposes of economy and reliability. The transmission systems of Western
5 Resources and KGE are operated as a single transmission system and, for
6 the purposes of the remainder of this testimony, will be referred to
7 collectively as Western Resources' transmission system.

8 **Q. PLEASE LIST THE UTILITIES WITH WHICH WESTERN RESOURCES IS**
9 **INTERCONNECTED.**

10 A. Western Resources is directly interconnected with Public Service Company
11 of Oklahoma ("PSO"), KCPL, Associated Electric Cooperative, Inc. ("AEC"),
12 Missouri Public Service Division of UtiliCorp United, Inc. ("MPS"), Oklahoma
13 Gas & Electric Company ("OGE"), WestPlains Energy Division of UtiliCorp
14 United, Inc. ("WPE"), Midwest Energy ("MWE"), Board of Public Utilities -
15 Kansas City, Kansas ("KCBPU"), Omaha Public Power District ("OPPD"),
16 and Empire District Electric Company ("EDE"). In addition, Western
17 Resources is "contractually" interconnected with Union Electric Company
18 ("UE") through a 345 kV transmission line, distinct portions of which are
19 owned by PSO, AEC and UE. A table listing Western Resources'
20 interconnections with other utilities is attached to this testimony as Schedule
21 ___ (RAD-1).

1 **Q. PLEASE EXPLAIN WESTERN RESOURCES' "CONTRACTUAL"**
2 **INTERCONNECTION WITH UE.**

3 A. Western Resources is a participant owner in the 345 kV transmission line
4 running generally from UE's control area in Missouri, to Morgan substation
5 in Missouri, to Neosho, Kansas, to Northeast Oklahoma (the "MOKANOK
6 Line"). Each of the four participating utilities owns only the transmission
7 facilities in its service territory but has a contract right to use an allocated
8 share of the capacity of the entire line. For example, Western Resources
9 owns and maintains the portion of the MOKANOK Line located in Kansas but
10 has capacity rights over the entire length. Moreover, through a filing before
11 the FERC in December 1996, the contract was modified to permit all eligible
12 transmission customers access to the line. This provides Western
13 Resources with a contract right to transmit to and from UE even though the
14 intermediary facilities are owned by another utility, AEC. It also permits
15 transmission customers to use Western Resources' system, including this
16 line, at a single transmission rate.

17 **Q. WHAT INTERCONNECTIONS WILL THE MERGED COMPANY HAVE WITH**
18 **OTHERS FOLLOWING THE MERGER?**

19 A. In addition to the interconnections described above for Western Resources,
20 the merged company, through KCPL, also will be directly interconnected with
21 the City of Independence, Missouri ("Independence"), UE, and St. Joseph
22 Light and Power ("SJLP"). In addition, the merged company, through KCPL,

1 will be "contractually" interconnected to the Nebraska Public Power District
2 ("NPPD"), MidAmerican Energy Company ("MEC"), and Lincoln (Nebraska)
3 Electric System ("LES"). This contract arrangement is for use of the MINT
4 Line as described by Mr. Branca and results in interconnects for KCPL similar
5 to those provided Western Resources through the MOKANOK Line.

6 Attached hereto as Schedule ____ (RAD-2) is a table which lists the
7 interconnections of the merged company. As can be seen from this
8 schedule, there are many common interconnected utilities between Western
9 Resources and KCPL. For example, both are interconnected with KCBPU,
10 EDE, MPS, UE, and AEC. These arrangements provide additional security
11 for the operations of the merged company.

12 **Q. PLEASE DESCRIBE THE INTERCONNECTIONS BETWEEN WESTERN**
13 **RESOURCES AND KCPL.**

14 A. Western Resources and KCPL are interconnected at eight separate points
15 which will provide the merged company reliable operations and significant
16 transfer capability.

17 **Q. WILL IT BE NECESSARY TO ENHANCE THESE INTERCONNECTIONS**
18 **FOLLOWING THE MERGER?**

19 A. No. These interconnections, and those with other utilities in the region, are
20 the products of coordinated transmission planning and construction efforts
21 that have been used by the MOKAN utilities for over 35 years. As a result,
22 the bulk transmission systems of the participating utilities have been built in

1 the most efficient manner to link power plants with load centers. Schedule
2 ____ (RAD-3) attached hereto, lists the interconnects between Western
3 Resources and KCPL. The two transmission systems are ideally situated for
4 joint operation and no additional expense is necessary to achieve reliable
5 and efficient service under the joint dispatch described by Mr. Morgan.

6 **Q. HOW WILL THE TRANSMISSION SYSTEMS OF THE MERGED**
7 **COMPANIES BE OPERATED?**

8 A. The transmission systems will be operated as a integrated system.
9 Transmission service will be provided under a single system-wide pricing
10 structure. This will permit transmission customers to traverse the combined
11 transmission system of the merged company for a single charge, depending
12 on the type of service being provided.

13 **Q. WILL THIS PRICING STRUCTURE OFFER BENEFITS TO TRANSMISSION**
14 **CUSTOMERS?**

15 A. Absolutely. For example, transmission service that currently uses KCPL's
16 and Western Resources' transmission systems must pay a transmission
17 charge for the use of each system. Post-merger, the same transaction will
18 pay a combined rate that is much less than the sum of the two stand alone
19 rates. Thus, customers will be benefited through increased transmission
20 access at lower cost.

21 **Q. WILL THE OPERATIONS OF THE MERGED COMPANY HAVE ANY**
22 **SIGNIFICANT ADVERSE EFFECT ON REGIONAL POWER FLOWS OR**

1 **TRANSMISSION AVAILABILITY FOR THIRD PARTIES?**

2 A. No. We do not anticipate that the merger of Western Resources and KCPL
3 will adversely impact regional power flows or transmission availability for third
4 parties. This is because power flows between the merging companies will
5 occur over the many substantial interconnections that exist between them and
6 little or no parallel flows are expected over other interconnected systems as
7 a result of intracompany activities.

8 Transmission availability for third parties is unaffected by the merger.
9 This is because, under Order No. 888, Western Resources can not receive
10 priority for use of its transmission system, but instead has access rights on
11 a basis comparable with all eligible customers.

12 **Q. ARE THERE ANY SIGNIFICANT CONSTRAINTS ON THE WESTERN**
13 **RESOURCES TRANSMISSION SYSTEM LIMITING TRANSFERS WITH**
14 **INTERCONNECTED SYSTEMS?**

15 A. There are no significant constraints on the Western Resources system that
16 would limit transfers with any of its interconnected neighboring systems.

17 **Q. HAVE THERE BEEN INSTANCES WHERE WESTERN RESOURCES HAS**
18 **BEEN UNABLE TO PROVIDE TRANSMISSION SERVICE OVER ITS**
19 **SYSTEM TO THIRD PARTIES?**

20 A. Generally transmission service is available to all parties. During 1996, only
21 the interfaces to CSW and OPPD tended to be fully scheduled. The
22 interconnection between Western Resources and CSW was at its maximum

1 limit due to the relatively low capacity available to third parties. With the
2 change in the MOKANOK line agreement, the available capacity of the
3 interconnect for open access service has increased such that the earlier
4 limitation no longer exists. The interconnection between Western Resources
5 and OPPD was occasionally fully scheduled from third parties moving power
6 from Mid-Continent Area Power Pool (MAPP), through Western Resources
7 to control areas in the southern part of the country. In 1996, OPPD was the
8 only MAPP Regional Transmission Committee (RTC) member connected to
9 Western Resources. Currently Western Resources is interconnected with
10 four members of the MAPP RTC which greatly increases the available
11 capacity between Western Resources and the MAPP region.

12 **Q. EARLIER IN YOUR TESTIMONY YOU STATED THAT AN RTG COULD**
13 **INCREASE TRANSMISSION ACCESS. IS WESTERN RESOURCES A**
14 **MEMBER OF AN RTG?**

15 A. Not as of the date this testimony was prepared; but, assuming the SPP
16 continues to develop its regional pricing proposals, Western Resources
17 expects to be a part of that process. Western Resources has participated in
18 SPP discussions for more than two years to develop a regional pricing tariff
19 that will permit transmission access throughout the SPP to qualified users
20 under a single rate methodology and also meet the requirements of Order No.
21 888. These discussions have involved transmission owning entities,
22 transmission dependent utilities, marketers and state regulatory agencies.

1 The result has been a consensus tariff proposal that is scheduled to be filed
2 with the FERC in mid to late 1997 with a proposed implementation date in
3 early 1998.

4 In brief, it is anticipated that the SPP regional transmission tariff will
5 contain a pricing structure that is flow based and distance sensitive. The
6 SPP will administer the tariff and will schedule power between the source and
7 sink control areas. Based on predetermined power flows established through
8 system modeling, transactions will be priced according to the use of those
9 two control areas and all other control areas affected by the flows based on
10 the amount of flow over each transmission line, the length of those lines, and
11 the average cost of the lines, grouped by voltage level. The SPP will then
12 distribute the tariff revenue among those systems impacted by the
13 transactions on the basis of the flows occurring on those systems.

14 **Q. DOES WESTERN RESOURCES SUPPORT THE SPP IN ITS EFFORTS TO**
15 **DEVELOP A REGIONAL PRICING TARIFF?**

16 A. Yes, for several reasons. First, it will result in increased access to power
17 supplies for SPP members by reducing the existing additive transmission
18 charges of interconnected systems. Second, it will be a pricing system based
19 on power flows rather than contract paths. Third, it will apply to all SPP
20 members, even those who are exempt from FERC jurisdiction. And fourth, it
21 will bring consistency in pricing among members.
22

1 **Q. WHY IS FLOW BASED PRICING PREFERABLE TO CONTRACT PATH**
2 **PRICING?**

3 A. Power flows according to the laws of physics, not according to contracts. For
4 example, utility A may contract with utility B to deliver power to utility C. The
5 power, however may flow from A to C through utility D. In this case utility B
6 would receive compensation for a transaction that did not occur on its system
7 and utility D, the transmitting utility would receive nothing except increased
8 loading and energy loss makeup on its system, possibly to the extent that
9 utility D would be required to curtail some of its own transactions. These
10 situations may occur because utility A would choose utility B as the
11 intervening utility if utility B's transmission rate is lower than utility D's rate
12 knowing full well that little or none of the power will flow over utility B.
13 Obviously, this situation is not fair but beyond that, it can create reliability
14 concerns. While contract path pricing may have been tolerated in the past
15 when a utility's generation function and transmission function worked in
16 concert and there were fewer transactions, it is inappropriate under open
17 access conditions.

18 **Q. HOW WILL THE SPP REGIONAL TARIFF RESULT IN CHARGES LOWER**
19 **THAN THE SUM OF THE PARTICIPATING MEMBER'S INDIVIDUAL**
20 **CHARGES?**

21 A. Because the SPP method will be flow based, customers will only pay a rate
22 based on the facilities actually used. For example, if a transaction is

1 scheduled on the 345 kV system and only flows on that system, the charge
2 will only include those costs. Under most individual transmission providers'
3 rates, all transmission costs are rolled into a single rate so that the customer
4 pays for all facilities, whether used or not. This characteristic becomes even
5 more important when transacting business over long distances which involves
6 primarily the extra high voltage systems. Thus, increased access at lower
7 prices will be available.

8 **Q. WILL MEMBERSHIP IN THE SPP AND THUS PARTICIPATION IN THE**
9 **REGIONAL TARIFF BE LIMITED?**

10 A. No. Membership is voluntary and is open to any electric utility, federal power
11 marketing agency, transmission service provider, and any entities engaged
12 in the business of selling electric energy or purchasing electric energy for
13 resale, located in or being adjacent to the SPP area. Moreover, it is
14 anticipated that access to the regional tariff will be granted to non-members
15 located in other NERC reliability councils and subject to NERC operating
16 criteria.

17 **Q. ARE THERE OPPORTUNITIES FOR SPP MEMBERS TO PARTICIPATE IN**
18 **OTHER REGIONAL TRANSMISSION PRICING?**

19 A. Yes. For example, several SPP members, including KCPL already belong to
20 the MAPP RTC, which also uses a flow based pricing methodology.
21 Depending on a utility's specific situation, this could be very beneficial as it
22 may make low cost power generated as far north as Canada available to SPP

1 utilities under MAPP's discounted regional pricing. Certainly, the cost of
2 transmitting that power would be much more if the same transaction was done
3 by a non-member since in that case, the non-member would be required to
4 pay a non-discounted transmission rate for each intervening utility. As with
5 the SPP, membership in MAPP is voluntary and open to all qualified entities.

6 **Q. DOES THE SPP OPERATE AN ISO?**

7 A. Not at this time; however, the SPP has been directed by its Board of Directors
8 to evaluate and plan for an ISO. That process began in May, 1997 and is
9 expected to proceed rapidly through the remainder of 1997. One of the legs
10 of an ISO is its regional transmission tariff. As I discussed earlier, most of the
11 work to develop that tariff has already been done and the tariff is expected to
12 be in place in early 1998. The second leg is reliability. In early 1997, the
13 SPP received authorization from its Board of Directors to form and staff a
14 Security Coordination function. The main purpose of this function is to
15 maintain the security and reliability of the interconnected transmission
16 systems of the SPP. SPP expects the Security Coordination function to be
17 fully operable by the end of 1997. The third leg is independence which will
18 be fully discussed at the SPP ISO task force meetings. It is anticipated that
19 a recommendation on the formation of an ISO within the SPP will be made to
20 the Board of Directors in early 1998.

1 **IV. IMPACT OF MERGER ON RELIABILITY AND SAFETY**

2 **Q. WILL THE MERGER OF WESTERN RESOURCES AND KCPL ADVERSELY**
3 **AFFECT THE RELIABILITY OF WESTERN RESOURCES' OR KCPL'S**
4 **ELECTRIC SYSTEMS?**

5 A. No. As discussed above, the merger of Western Resources and KCPL will
6 actually benefit customers through more reliable operations. The combined
7 availability of Western Resources' and KCPL's generating units, plus a larger
8 pool of generating facilities to call upon, will result in an improvement in the
9 reliability of the merged company's generating system. In addition, as a
10 result of the strong interconnections between Western Resources and KCPL,
11 the merger of these companies' service areas will not adversely impact the
12 reliability of the companies' transmission systems.

13 **Q. THANK YOU.**

WESTERN RESOURCES, INC.

Transmission Interconnections
Western Resources

Interconnecting Utility	Facility	Voltage (kV)	Thermal Rating (MVA)
PSO	Dearing - Bartlesville	138	150
KCPL	Pentagon - Greenwood Line	161	224
KCPL	Marmaton - Centerville Line	161	233
KCPL	Neosho - LaCygne Line	345	956
KCPL	Wolf Creek - LaCygne Line	345	1195
KCPL	Stranger Creek - Iatan Line	345	1099
KCPL	Stranger Creek - Craig Line	345	1099
KCPL	Spring Hill Transformer	115/161	50
MPS	Stranger Creek - Platte City Line	161	400
OGE	Wichita - Woodring Line	345	900
OGE	Creswell - Kildare Line	138	137
WPE	St. John - Mullergren Line	115	97
WPE	Knob Hill - Greenleaf Line	115	97
WPE	Circle - Mullergren Line	230	350
WPE	East Manhattan - Concordia Line	230	320
WPE	Murray Gill - Milan/Harper Line	138	45
MWE	Summit - Knoll Line	230	320
BPU	Edwardsville Transformer	115/161	150
OPPD	Kelly - Humboldt Line	161	320
EDE	Neosho - Riverton Line	161	194
EDE	Litchfield - Asbury Line	161	211
<u>Joint Interest Facility</u>			
AEC, PSO, UE	MOKANOK Line	345	477
MPS, KCPL	MOKAN Interconnection	345	717

WESTERN RESOURCES, INC.

Transmission Interconnections
Western Resources and KCPL Combined

Interconnecting Utility	Facility	Voltage (kV)	Thermal Rating (MVA)
PSO	Dearing - Bartlesville Line	138	150
MPS	Stranger Creek - Platte City Line	161	400
MPS	Montrose - Archie Line	161	224
MPS	Stilwell - Archie Line	161	224
MPS	Martin City Line	161	293
MPS	Southtown - Martin City Line	161	224
MPS	Barry - Roanridge Line	161	293
MPS	Tiffany - Roanridge Line	161	293
MPS	Nashua - Roanridge Line	161	293
MPS	Duncan Transformer	161/69	60
MPS	Nashua Bus Tie	161	335
MPS	Glenaire - Liberty Line	69	66
MPS	Amoco - Mayview Line	69	71
OGE	Wichita - Woodring Line	345	900
OGE	Creswell - Kildare Line	138	137
WPE	St. John - Mullergren Line	115	97
WPE	Knob Hill - Greenleaf Line	115	97
WPE	Circle - Mullergren Line	230	350
WPE	East Manhattan - Concordia Line	230	320
WPE	Murray Gill - Milan/Harper Line	138	45
MWE	Summit - Knoll Line	230	320
BPU	Edwardsville Transformer	115/161	150
BPU	Greenwood - Metro Line	161	224
BPU	Terrace - Barber Line	161	293
BPU	Weatherby - Maywood Line	161	273
BPU	Shawnee - Barber Line	161	224
OPPD	Kelly - Humboldt Line	161	320
EDE	Neosho - Riverton Line	161	194
EDE	Litchfield - Asbury Line	161	211
EDE	Centerville - Marmaton Line	161	233

WESTERN RESOURCES, INC.

Transmission Interconnections
Western Resources and KCPL Combined

Interconnecting Utility	Facility	Voltage (kV)	Thermal Rating (MVA)
Independence	Leeds Substation	161	320
Independence	Hawthorn Substation	161	320
Independence	Courtney Substation	69	63
Independence	Lake City - Blue Valley Line	69	71
Independence	Sugar Creek Substation	69	57
Independence	Hawthorn Substation	69	43
AEC	Montrose - Clinton Line	161	370
AEC	Salisbury - Thomas Hill Line	161	277
AEC	Birmingham - Mo. City Line	161	187
AEC	Excelsior Springs - Mo. City Line	161	187
AEC	Norton Bus Tie	161	223
SJLP	Hawthorn - St. Joseph Line	345	721
SJLP	Iatan - St. Joseph Line	345	956
SJLP	Nashua - Lake Rd. Line	161	153
UE	Salisbury - Moberly Line	161	180
<u>Joint Interest Facility</u>			
AEC, PSO, UE	MOKANOK Line	345	477
MPS	MOKAN Interconnection	345	717
AEC, LES, MEC, NPPD, OPPD, SJLP	MINT Line	345	142
MPS, UE	Missouri Interconnection	345	598

WESTERN RESOURCES, INC.

Transmission Interconnections
Between Western Resources and KCPL

Facility	Voltage (kV)	Thermal Rating (MVA)
Pentagon - Greenwood Line	161	224
Marmaton - Centerville Line	161	233
Neosho - LaCygne Line	345	956
Wolf Creek - LaCygne Line	345	1195
Stranger Creek - Iatan Line	345	1099
Stranger Creek - Craig Line	345	1099
Spring Hill Transformer	115/161	50
Swissvale - Stilwell	345	717