Exhibit No:

Issue: Feasibility and Implementation

Witness: Rodney P. Bourne
Type of Exhibit: Direct Testimony
Sponsoring Party: City of Rolla
Case No: EA-2000-308

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Service Commission

PREPARED DIRECT TESTIMONY

OF

RODNEY P. BOURNE

on behalf of

CITY OF ROLLA/ROLLA MUNICIPAL UTILITIES

NON-PROPRIETARY

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1	I.	Introduction and Summary
2	Q.	Please state your name for the record please.
3	A.	Rodney Bourne.
4	Q.	By whom are you employed and in what capacity?
5	A.	I am employed by Rolla Municipal Utilities as the Staff Engineer.
6	Q.	Please briefly explain the duties of the position you hold and your professional
7		background.
8	A.	I have responsibility for utility engineering with regards to the operations of the electric
9		and water systems for RMU. I have been the Staff Engineer since 1998. Prior to that
10		time I was employed by a large engineering/consulting company located in the Kansas
11		City metropolitan area. I have approximately 11 years of experience as an engineer. I am
12		a licensed Professional Engineer in the State of Missouri.
13	Q.	Please briefly describe your educational background.
14	A.	I graduated from North Dakota State University with a Bachelor of Science Degree in
15		Electrical and Electronics Engineering in 1989. I obtained my Professional Engineering
16		License in 1994.
17	Q.	What is the purpose of your testimony in this proceeding?
18	A.	It is my intent to provide the Commission with technical details regarding our request to
19		acquire Intercounty's facilities in the Southside Annexation Area.

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II. Fair and Reasonable Compensation Under the Statute

- Q. Let's begin with your analysis of fair and reasonable compensation. Mr. Watkins stated in his testimony that you would provide the details on how RMU arrived at the
- 4 \$1,934,650.44 to be paid to Intercounty for its facilities located within the Area.
- 5 A. That is correct.
- Q. Let's take these one at a time. Has RMU made a determination of the present-day reproduction cost, new, of the properties and facilities serving the annexed area, less
- 8 depreciation computed on a straight line basis?
- 9 A. Yes.

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- 10 Q. What is that amount?
- 11 A. \$50,554.90.
- 12 Q. Please describe how you arrived at that amount.
- A. Intercounty provided staking sheets and a cost breakdown of the facilities located within
- the Area as part of a detailed response to a RMU Data Request. This included such
- things as transformers, poles, conductors, guy wires, etc. The Intercounty response
- included a present day reproduction cost of their facilities located within the Area. The
- value placed on their facilities by Intercounty was \$547,131.01.
- 18 Q. The RMU number appears quite a bit smaller than Intercounty's reproduction cost
- amount. Why is that?
- A. The statute allows depreciation to be computed on the facilities, on a straight line basis.
- Once depreciation of the Intercounty facilities is taken into account, the value goes down

in relation to the age of the facilities.

- 2 Q. How was the depreciation calculated by you?
 - A. Intercounty provided the depreciation schedules that they utilize to depreciate their facilities as part of a response to an RMU Data Request. Intercounty uses a straight line depreciation value of 2.8% per year for their electric facilities. This works out to a useful life of 35.71 years.

RMU performed a few spot checks of the facility information provided by

Intercounty and has reached a consensus that we can accept the present day reproduction
cost of \$547,131.01 that Intercounty has placed on their facilities.

The statute then says to deduct depreciation on a straight line basis from that amount. Straight line depreciation, in general terms, means that you come up with an estimated useful life for a particular asset, and you amortize (or divide) the cost of the asset equally over that useful life. In simple terms, let's say a 40 foot class 1 utility pole has an estimated useful life of 40 years, and that its current cost is \$200. You also add in the cost to install it, and let's say that is another \$200. You then divide \$400 by 40 years to get a straight line depreciation amount of \$10 per year over that service life. This is a very simple example and does not include items such as "salvage value" which would be the amount the pole is estimated to be worth at the end of its life, or in other words, what someone might pay for it at that point. It also doesn't address "negative salvage" which would take into consideration that you would have to pay a crew to come out and dismantle the attachments and take the pole out.

Some people may disagree over what the service life of particular things are. To

aid us in this situation, Intercounty provided the depreciation schedules that they utilize to depreciate their facilities.

The next thing you have to know to meet the criteria in the statute is how long the facilities of Intercounty have been installed in the Southside Annexation area, so you can know how many years of depreciation to apply to the reproduction cost new.

Q. How did you determine the age of Intercounty's facilities?

A. All of the Intercounty facilities were not installed at the same time. RMU requested specific installation dates from Intercounty for the various pieces of equipment that Intercounty uses to construct a pole line, i.e. poles, crossarms, guys, conductor, transformers, etc. Intercounty's response to most of these requests was that specific installation dates were not available for each specific item. Intercounty suggested that RMU could estimate the installation date of poles by inspecting the brands on each pole. Intercounty also provided transformer data sheets with installation dates.

RMU was able to determine that Intercounty was in the process of acquiring easements from 1938 to 1952 in the Area. Logically, it would follow that Intercounty was obtaining these easements to allow for the construction of electric lines during this period in time. RMU also researched the date when the four primary subdivisions in the Area were platted. Our research indicated that a majority of the Subdivisions were platted in the mid to late 1950's. It would also logically follow that the infrastructure, i.e. electric systems, for these developments would have been installed shortly after the respective platting.

	Prepa	ared Direct Testimony of Rodney Bourne	Case No. EA-2000-308
1		Subdivision	Date Platted
2		Ozark Terrace Subdivision	c. 1953
3		Parkview Subdivision	c. 1955
4		Parkview Second Subdivision	c. 1957
5		Parkview Third Subdivision	c. 1963
6		Longview Subdivision	c. 1959
7		Line Barnitz Forest Subdivision	c. 1973
8		Line Barnitz Forest 1st Add Subdivisio	n c. 1974
9	Q.	What were you able to determine from the dat	a?
10	A.	RMU estimates that 70 percent of Intercounty	's facilities were originally installed prior to
11		1965. This means that 70% of the present day	reproduction cost, or \$382,991.71, will
12		have been fully depreciated by 2001. 2001 is	the year in which we presume the transfer
13		will take place.	
14		RMU has assumed the other 30 percen	t, or \$164,139.30, of the facilities were
15		installed prior to 1976. These facilities will have	ave been depreciated for 25 of the 36 years,
16		leaving only 11 years of value remaining. The	is calculates into \$50,554.90, or
17		[\$164,139.30 x 11 years x 2.8% per year].	
18		What this boils down to is that RMU b	pelieves that the Intercounty facilities have a
19		value under the statute (i.e., present-day repro	duction cost, new, less depreciation
20		computed on a straight line basis) of \$50,554.	90 using the procedures outlined in the
21		statute.	
22	Q.	What about poles, transformers or other equip	ment installed after 1976?

- 1 A. It depends upon whether the new installation is considered a maintenance item or if it is 2 considered a new facility. Since Intercounty does not keep track of the installation dates of specific pieces of equipment, as stated in their responses to RMU Data Requests, 3 4 except for transformers, RMU has assumed that Intercounty is only maintaining the 5 original facilities and that they have been depreciating the facilities since they were originally installed. 6 7 What have you determined to be the amount to represent "four hundred percent of gross Q. revenues less gross receipts taxes received by the affected electric supplier from the 8 9 twelve-month period preceding the approval of the municipality's governing body ..., normalized to produce a representative usage from customers at the subject structures in 10 the annexed area?" 11 From Intercounty responses to our data requests, we have determined that amount to be 12 A. \$1,481,853.80. 13 Please describe how you arrived at that amount. 14 Q. Intercounty provided a list of customers and associated revenues for a fourteen (14) 15 Α. month period from July 1997 through August 1998. RMU used this revenue list to obtain 16 the appropriate revenue as outlined by the statute. 17 18 Q. How were you able to do that? We went through the list one customer at a time and compared the customer's 19 Α.
 - corresponding "map location" to the maps of the Area also provided by Intercounty through the data request process. RMU found many customers on the revenue list that Intercounty said were in the Area were actually located outside of the Area.

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- A. RMU developed its own spreadsheet of the Intercounty customers that were left on the Intercounty revenue list. RMU also deleted the revenues associated with July 1998 and August 1998. This gave us the actual total revenue Intercounty received from their members in the Area for the twelve (12) months preceding the annexation of the Area.

 The RMU spreadsheet is attached as Schedule RB-1 to this testimony. Because it contains specific customer names and usage, we are filing both a public (non-proprietary) (NP) version of the schedule which does not contain any names, and a Proprietary (P) version of the same schedule with the names so Intercounty and any other interested party may check them for accuracy.
- 11 Q. Were there any other anomolies in the Intercounty revenue list?
- 12 A. Yes. There were two customers on the revenue list that no longer exist.
- 13 Q. What do you mean?
 - A. The CT Farm and Country Store, which was located in the Area, burned down after the Area was annexed. The remains of the building have since been torn down. Since any new structure to be built and supplied with electricity on that parcel would be classified as a new structure, and could only be served by RMU, RMU does not believe we should be obligated to pay four times the revenue for that property.

The other property was formerly owned by Charles Moreland and was located on Rolla Street. This property has been torn down to allow the development of the new Wild Rose Hill Subdivision which RMU is serving with electricity. For similar reasons, RMU does not believe we should be obligated to pay four times the prior revenue for a

1 property that no longer is a customer of Intercounty since any new structure built there 2 would be a lawful customer of RMU. Q. The statute states, "four hundred percent of gross revenues less gross receipts taxes 3 4 received.." How have gross receipts taxes been addressed by you? 5 Intercounty stated in a response to a Data Request from RMU that the revenue list it A. 6 supplied did not include any gross receipts taxes. Therefore, this part of the statute has 7 been addressed because there are none. 8 Q. How did you address the statute's requirement for the revenues to be "normalized to 9 produce a representative usage from customers at the subject structures in the annexed 10 area"? We asked Intercounty in a Data Request if they believed their revenues were normal or 11 A. 12 whether the revenues needed to be adjusted for the purposes of the statute. From Intercounty's response, we understand that Intercounty is not contending the actual 13 revenues were abnormal. Therefore, we multiplied the net amount by 400 percent, as 14 15 directed by the statute, and that produced the amount of \$1,481,853.80. Q. What have you determined to be the amount to represent "any federal, state and local 16 17 taxes that may be incurred as a result of the transaction, including the recapture of any 18 deduction or credit?" 19 A. We understand from Intercounty's responses to our data requests that there would not be 20 anything in this category. 21 Q. What have you determined to be the amount to represent "the reasonable and prudent

cost of detaching the facilities in the annexed areas and the reasonable and prudent cost of

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- constructing any necessary facilities to reintegrate the system of the affected electric supplier outside the annexed area after detaching the portion to be transferred to the municipally owned electric utility?"
- 4 A. That amount is \$80,000.00.

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5 Q. Please describe how you arrived at that amount.

based on our own experience with similar work.

A. RMU has developed a plan in which Intercounty's reintegration costs will be minimized.

By allowing Intercounty to keep their trunk lines active through the Area, the costs of

reintegration have been greatly reduced. The majority of the Intercounty cost will be

relocating their conductors from their old poles to new poles installed by RMU. This

procedure is explained in great detail in the Feasibility Study prepared by RMU. In

general terms, RMU had to identify what facilities Intercounty would need to relocate or

detach. RMU estimated what it would cost to "re-integrate" Intercounty's facilities,

A major potential issue was the 12.47kV trunk lines that Intercounty has which run through the Southside Annexation, but we think we have a reasonable solution. The Intercounty lines serve as ties between Intercounty's substations. In preliminary discussions, Intercounty's representatives indicated that as a result of this case, they would have to abandon these lines, sell the segment that is located within the Southside Annexation to RMU, and then build a replacement line around the Area and outside the City to achieve the same interconnection that existed before. This seemed to us to be a needless expense for "reintegration" since these lines do not need to be relocated outside of the Area. RMU is proposing a solution that does not render these pole lines useless,

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but instead allows both RMU and Intercounty to utilize them. It is RMU's intention to diminish the amount of reintegration costs that would be incurred in this situation. Basically, RMU proposes to replace the existing poles in this line with taller poles. This would allow us to elevate the Intercounty conductors enough to allow RMU to attach its own conductors below those of Intercounty. In this fashion, RMU will utilize the same corridor that presently exists, Intercounty will essentially not notice a difference except that its conductors are higher off the ground than they were before. In addition, Intercounty would no longer have maintenance responsibility for the pole line. If we were doing this voluntarily, it would probably be the subject of a contractual agreement between RMU and Intercounty because it would mean that Intercounty's facilities would be located on RMU's poles. This is not an uncommon situation in the industry. Mr. Watkins included a sample of such a joint use agreement with his testimony. Intercounty already has lines on some of RMU's poles. I am comfortable that, with Intercounty's cooperation, we could enter into an agreement that assures Intercounty that it can continue to have its conductors on these poles and which deals with other issues such as liability, in a manner that is common in the industry. I think this is a vastly superior solution to Intercounty building a new line in a new location just to be outside of the city limits. Intercounty would benefit because RMU would bear the entire expense of erecting the new poles. RMU would reimburse Intercounty for relocating its conductors and for detaching single-phase and multi-phase branch circuits.

RMU has estimated this expense by taking 180 poles (approximate number of poles involved) times \$400 per pole. This number is \$72,000.00. To this number we

Prepared Direct Testimony of Rodney Bourne Case No. EA-2000-308 have added \$8,000.00 to cover miscellaneous expenses to give a total of \$80,000.00. Q. Do you have any other ideas regarding re-integration costs? A. RMU would be willing to pay Intercounty's actual costs for re-integration of facilities as described in the Feasibility Study instead of trying to estimate the expenses up-front. This would involve the Commission removing this number from the calculation and ordering that RMU reimburse Intercounty for actual costs required to re-integrate their facilities. RMU would want a "not-to-exceed" cap placed on the reimbursement amount to protect us in the event of unreasonable expenses. **Excluded Intercounty Facilities** Q. Are there any facilities of Intercounty within the Southside Annexation that you did not include in your analysis of fair and reasonable compensation? A. Yes. Intercounty has an office building located on Highway 63 south. We did not include that in our analysis for several reasons. One is that it is not the same type of thing as an overhead electric line in that it is not something directly used in providing service to customers. Another is that RMU has no use for the facility. Another reason is that Intercounty will continue to have customers in the Rolla area that may wish to use that facility and Intercounty presumably will still have a need for the building to serve its other customers and any new customers that it adds outside of the city limits. Q. Has RMU made a determination of "any other costs reasonably incurred by the affected electric supplier in connection with the transaction?"

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Intercounty in connection with the transaction. RMU suspects that Intercounty will

At this point, it is difficult for us to determine any other costs "reasonably incurred by"

request that RMU pay for additional items that were not included in the other categories of reimbursement. RMU has included a figure of \$322,441.74 in the compensation amount to deal with these unknowns. We calculated this quantity by adding up the first items of the compensation amount and multiplying that figure by 20 percent. Of course, if Intercounty can not substantiate these other expenses, this amount would go away.

III. FEASIBILITY STUDY

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- 7 Q. Did you prepare a Feasibility Study related to RMU's request?
- 8 A. Yes. The Feasibility Study is attached as **Schedule RB-2** to this testimony.
- 9 Q. Can you summarize the Study?
- 10 The purpose of the study was to present RMU's plan for transferring the Intercounty A. members located in the Area to the RMU electric supply system. The study goes into 11 12 technical detail on how the transfer can be accomplished and also presents a schedule and other costs that will be required on RMU's part to achieve the transfer. As discussed in 13 14 my previous testimony, RMU's plan is to utilize the utility corridors of Intercounty to 15 begin development of a distribution system in the Area. The Intercounty tie lines would 16 continue to be operated by Intercounty but be placed on taller RMU poles to allow 17 installation of the RMU system.
 - Q. Why doesn't RMU just build a separate pole line?
- 19 A. There are already areas within the City Limits where Intercounty and RMU have pole
 20 lines that run adjacent to each other. This type of installation requires additional space
 21 for the second pole line that could be used for development instead. Typically, this is a
 22 needless duplication of facilities to capture a minimal number of customers. You also

- 1 can run into maintenance and safety concerns.
- Q. What do you mean?

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- A. Instead of working on conductors located on a single pole line, line crews must avoid conductors located on a different pole line located near the work area.
- What would happen if the Commission does not rule in RMU's favor and order the sale of the Intercounty facilities within the Area?
 - A. As it stands today, RMU will build new pole lines and extend its electric services into the Area as development occurs. For the most part, this does not present any problems in the undeveloped areas. For the undeveloped areas, RMU will request easements for the new pole lines as new developments are planned and platted in the Area. This is the same procedure that the City has been using to plan growth for some time.

The areas that pose greater problems are in the existing subdivisions located in the Area where Intercounty has overhead electric lines installed in the back yards. There are still vacant lots located in these subdivisions which, if a home is built there, only RMU can legally serve. If the Commission does not authorize sale of the Intercounty facilities to RMU, RMU will have to build duplicate facilities in these subdivisions to serve the few remaining undeveloped lots. Because Intercounty is already established in the back yard lot lines, RMU would have to build our facilities in street right-of-way. This will not be a very desirable situation for the new home owner or for the existing homeowners. You have stated that you think a joint pole contact agreement can be worked out between Intercounty and RMU. Why not build joint with Intercounty in the backyards?

A. A majority of the customers located in these subdivisions are fed from branch lines fed

from the Intercounty tie lines. These branch circuit pole lines would need to be upgraded
with taller poles to make it possible for both Intercounty and RMU to be in joint contact.
RMU believes that it is an unwarranted expense for both the Intercounty and RMU
customers to have duplicate facilities in these subdivisions. It makes more sense, both
economically and technically, to upgrade the trunk lines to allow joint construction and
have a single utility be the sole server of electricity to the subdivisions through the supply
of branch lines. RMU will be required to install trunk lines in the Area anyway to serve
all new developments. It makes sense to install the RMU trunk lines in existing utility
corridors. It also makes sense to have RMU serve the subdivisions through these branch
lines since, as I understand it, RMU is the only entity which can legally serve the
remaining undeveloped property.
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- Q. You have indicated that RMU is going to allow Intercounty to maintain their tie line conductors on top of the new pole line that RMU will install. Is Intercounty's investment in the tie lines included in RMU's calculation of "fair and reasonable" compensation.
- A. Yes. As I have indicated, RMU is paying for these conductors, but we would allow Intercounty to maintain and operate these conductors under a pole contact agreement. So we are compensating Intercounty for these facilities, and then allowing Intercounty to continue to maintain ownership of the conductors. In my opinion, this appears to be a benefit to Intercounty.

Impact of Sale on Intercounty

Q. How will the loss of load or revenue from the sale of all of the facilities affect
Intercounty?

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RMU has estimated the load in the Area at approximately 2,500 to 3,500 kW. This load A. is supplied from three different Intercounty substations. I do not have load information for the three Intercounty substations or load on the specific feeders that run through the Area. However, I believe that the loss of load will be insignificant to the operation of these lines. Intercounty has stated that they have been adding an average of 718 customers per year to their system. Based on the growth patterns in Rolla, I believe that it will not take a very long period of time for Intercounty to recover the loss of load from the Area. In fact, this transfer of load from Intercounty to RMU may permit the addition of new load on the Intercounty system that previously would have required Intercounty to 10 upgrade its substations.

Length of Outage for Transfer

- O. How long might a customer be out of power while the transfer you propose is taking place?
- We estimate that there will be an outage that lasts from 1 to 2 hours while the transfer is A. underway.

Relative Financial Impact on RMU

- Q. How do the expenses and revenues associated with the Area compare to RMU's total expenses and revenues?
- A. Assuming RMU pays for the facilities out of our cash reserves, then we would have first and second year operation expenses in the amounts of \$282,075.54 and \$122,728.16 respectively. RMU projects operation revenues in the amounts of \$14,400.00, \$241,920.00, and \$263,520.00 for the first, second, and third years respectively.

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RMU's Operation Expenses and Income for Fiscal Year 1999 was \$12,386,326.82 and \$14,001,006.77 respectively. The Expenses and Revenues associated with the transfer of the Intercounty customers to the RMU system would only be a small part of our overall budget. It is not an insignificant amount and it will become part of our overall budgeting plan if the Commission awards these facilities to RMU.

Stranded Customers

Q. Are there any other concerns that you have relating to the feasibility study?

Yes. RMU's investigation indicates that if the Commission grants our request in this proceeding, there will be two present customers of Intercounty who will be "stranded" in the sense that they are located outside of the Area, but are served from Intercounty facilities located within the Area. These two customers are (1) the property owned by Harley Moore and located at the southeast corner of State Route 72 and Dewing Lane, and (2) the property owned by Gary Buenger located at #551 Kent lane.

The Moore property has been preliminarily identified by the Missouri Highway and Transportation Department (MHTD) to be located in the future right-of-way of State Route 72. RMU expects that this property will be acquired and removed by MHTD to allow relocation of State Route 72.

The Buenger property is currently served via an Intercounty branch line located in the rear of the property. This line would be transferred to RMU under this proceeding. RMU would like Intercounty to voluntarily agree to the transfer of this customer, with the Commission's permission, to RMU as part of this proceeding. RMU is willing to pay the four times revenue related to this customer in the amount of \$5,775.36. This amount has

been included in our "fair and reasonable compensation" amount of \$1,934,654.44.

If not transferred to RMU in some fashion, Intercounty would be required to construct a single phase line approximately 1,470 feet in length to serve the Buenger property from another Intercounty line. This does not appear to be a reasonable expense for Intercounty to incur, and RMU to pay for as a reintegration cost, just for Intercounty to keep this one customer.

IV. EASEMENTS

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- Q. What experience do you have regarding the acquisition of easements for utilityconstruction?
- A. One of my responsibilities as the Staff Engineer for RMU is to acquire utility easements for the installation of water and electric facilities, so I do that as a part of my job.
- Q. Please describe your understanding of the utility easements that Intercounty has for its
 distribution lines in the Area.
 - A. The issue of Intercounty's easements presents several potential issues. RMU has discovered through Data Request responses that Intercounty's practices concerning easements have the potential for creating expensive problems both for Intercounty and RMU in this situation.
- 18 Q. Please explain.
- 19 A. There are several types of issues that we have discovered.
 - Intercounty apparently has a practice of obtaining blanket easements for their lines. This type of easement does not provide a discrete legal description of the easement, e.g., a 10 foot wide easement centered on a legally described line. Instead, Intercounty's easements

allow them to construct their distribution lines or systems anywhere on the described parcel of land. This could affect any size parcel of land. There is also not a deadline for constructing the lines. So in theory, Intercounty could return to a parcel of land 30 years after installing the original line and relocate it or construct additional lines wherever they wanted as long as they constructed on that described parcel of land. While the practice of blanket easements is not prohibited, it could cause problems where a parcel of land has been subdivided into 30 different lots. That blanket easement could still apply to all of the lots; even the lots that did not originally have a power line installed across them.

Another problem is that some easements that Intercounty obtained do not contain legal descriptions. It is my understanding that it is a good business practice to put a legal description in an easement so that a surveyor can go upon the land and locate the easement. The failure to include a legal description, as I understand it, does not destroy the validity of the easement, but it presents the prospect that there will be disputes about the location or width of the easement. This means that the landowner or a mortgage holder on the property, or both, could cause Intercounty to incur expenses to deal with the dispute. This could involve paying more money to the landowner or the mortgage holder or both in order to obtain a properly described easement, or in a worst case scenario, substantial expense due to litigation over the problem and ultimately a condemnation proceeding.

In our investigation of Intercounty easements pertaining to the Area, RMU ascertained that Intercounty did not produce any easement documents for specific locations in the Area. RMU asked Intercounty for information regarding these areas in

RMU Data Request 90. The information received in return was not sufficient to determine that easements existed for these areas. For example, RMU requested easement information for the Parkview Subdivision. At the time in which this subdivision was platted, utility easements were not included as part of the Recorded Plats. Intercounty would have needed to have a dedicated easement for each lot or it would have needed a easement dedication from the developer. RMU was not able to ascertain that Intercounty ever obtained easements for its facilities in this subdivision.

RMU also requested easement information for Intercounty facilities located in Sections 14, 18, and 19 of Township 37 North, Range 7 West. Intercounty's responses were not for Range 7 West, but for Range 8 West. Therefore, RMU was unable to determine if Intercounty possessed easements for their facilities located in Range 7 West.

It should be noted that when the Longview and Line Barnitz Forest Subdivisions were platted, utility easements were dedicated on the recorded plats. However, there are instances in the Longview Subdivision where Intercounty has installed facilities outside of the dedicated utility easements. RMU was not able to determine from the Intercounty responses to our data requests if they had obtained easements for these specific locations.

A more prevalent problem is that Intercounty apparently has a practice of obtaining easements for power lines, but not recording them. It is my understanding that the principal reason for recording an easement is that it provides the general public with notice of the easement deed. The reason for this, is that recording the easement gives notice to a subsequent purchaser of the land on which the easement is located that the purchase is subject to the pre-existing easement. I am not a lawyer, and the lawyers may

- write about the topic in their briefs in this case, but it is my understanding that if you don't record an easement, it is only good between the two parties to the easement.

 Therefore, the lack of recording of an easement can create legal problems if the land is sold. If the easement is not recorded, a later purchaser of the land or a mortgage holder doesn't have legal notice of the easement. I am told that there is a Missouri statute, section 442.400 of the Revised Statutes of Missouri, which says that "no such instrument shall be valid, except between the parties thereto, and such as have actual notice thereof, until the same shall be deposited with the recorder for record."
- 9 Q. Are you saying that Intercounty never recorded any easements?
 - A. We asked Intercounty to provide us with any easements they had that pertained to the Area. Intercounty provided a stack of over 100 easements to RMU as a response to two RMU Data Requests. Our investigation reveals that only 15 of the easements provided actually pertained to the Area. And of those 15 easements, none of them were recorded at the Phelps County Courthouse in the time period in which they were obtained -- 1938 through 1952. In addition, of these 15 easements, four were not notarized. It is my understanding that these easements would not be recordable without a notarized signature.
- 18 Q. Are these easements important?

- A. Absolutely. If you build a power line and you don't have an easement for the land on
 which you build it, you expose yourself to a lawsuit from the landowner and anyone with
 a recorded interest in the land, such as a mortgage holder, for trespass.
- Q. Does Intercounty have the ability to assign these easements with the accompanying

- power lines if the Commission orders the sale as RMU has requested?
- A. It is my understanding of the law, that easements, unless they specifically provide otherwise, are assignable. So the answer would be yes.
- 4 Q. What does that mean in this situation?
- A. If the Commission grants the City's application and establishes the Southside Annexation

 Area as the exclusive service territory for RMU, and orders the sale of the facilities as we

 have requested, along with the accompanying land rights on which they are located, there

 are going to be a lot of unanswered questions and the potential that the City will have to

 expend a lot of money to correct the problems that have been created solely by

 Intercounty.
- 11 Q. Can you describe the problems you see?

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I can envision several types of problems. There may be more that I haven't thought of.

One potential problem is that the persons who gave the easements to Intercounty might claim that a transfer by Intercounty is invalid. Another is that because the easements were not recorded, they are not valid as between anyone but the original grantor and Intercounty. That means that mortgage holders, who routinely record the mortgages, would not have notice of the easement. Another is that if the original grantors of the easement sold the property to someone else, the new owners may claim that the easement is not valid as to them because they were not a party to the document, and it was not recorded. The bottom line is that the apparent practice of Intercounty of not recording easements creates the potential for a significant number of disputes which could be expensive to deal with, and could ultimately require the City to bring condemnation

- actions to clearly establish the boundaries of the easements.
- Q. Is this a problem just because RMU wants to acquire the power lines?
- A. No. Many of the potential problems exist right now. For example, if Intercounty

 obtained an easement for a power line from Jane Doe, and Jane Doe sold the property to

 Bob Jones without recording the easement, Bob Jones could claim that the easement is

 invalid as to him because it was not recorded. There may be a mortgage holder involved
- 7 with Bob Jones who also did not get any notice.

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- Q. What about the language in the statute that says "and such as have actual notice thereof."
 Wouldn't an overhead power line running across a field provide Bob Jones with "actual notice" of the easement?
 - A. I can't answer that. It might or it might not. That's part of the problem. The lack of the recorded easement creates the *potential* for legal disputes. Bob Jones might want to hire a lawyer and fight about whether they had actual notice of it or not. And the line might be underground. While Bob Jones might be able to look out a window and see the power line, the mortgage holder might not be aware that the power line is there.
- 16 Q. Is there a "bottom line" to this particular problem?
- A. At this point, the City's position is that it may have to condemn easements for all of the lines on which Intercounty's facilities in the Southside Annexation are located. What that means is that the City will potentially have to spend money to survey the easements, litigate, and obtain proper easements. None of those expenditures would have been necessary if Intercounty had followed proper practices in the first place by including proper legal descriptions and recording the easements.

- 1 Q. Can you estimate how large those expenses would be?
- 2 A. That is difficult because we don't know how many people (i.e., landowners, mortgage 3 holders, leaseholders or others) will raise legal questions, and we don't know how hard or 4 how long some people or companies may resist. I discussed this situation informally 5 with the City Counselor and I can come up with a scenario, which might not even be a 6 worst-case scenario, and say that, on average, it will cost RMU \$1,500 per easement in 7 legal fees and \$0.25 per square foot to pay the condemnation awards. A complete survey 8 of the Area to obtain legal descriptions of all of the easements could cost an additional 9 \$80,000. RMU has estimated that approximately 180 parcels of land could be affected 10 with approximately 235,668 square feet of required easements. If you apply those figures 11 to all the easements in the Southside Annexation, that totals to approximately \$408,892 in 12 potential expenses the City would have to pay to ensure that we have complete and legal 13 use of all of the existing Intercounty utility corridors in the Area.
- 14 Q. What do you think the Commission should do about this?
- 15 A. I think that the Commission should deduct that amount from the otherwise "fair and reasonable compensation" that it determines the City should pay Intercounty.
- Q. Can Intercounty fix the problems that you said it has created?

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A. I suppose that in the situation where the easements are properly described and the land has not changed hands, and there have been no intervening mortgages or other interests recorded, that Intercounty could record the easements. That might solve the problem as to those situations. If the land has changed hands, Intercounty would have to get easements or full releases from the current and any intervening landowners and any lien

holders, and then record something to demonstrate that everyone in the chain of title has notice. It is my understanding that it can be a complex legal problem, and I don't profess to give anyone any legal advice as to how to solve it here. What I am saying in general is that if Intercounty can timely produce properly described easements from all the current and intervening landowners, and releases from all the lien holders or other parties with interest in the land, so that the City is assured that no one in the chain of title will sue it for trespass for those lines that Intercounty built and we would be obtaining, then the City would not have the potential expenditures to deal with the legal problems, and would not need to have a set off of dollars to protect it.

V. Summary

- 11 Q. Could you summarize your testimony?
- 12 A. Yes. I have presented the Commission with a Feasibility Study detailing a plan on how a
 13 transfer of facilities could efficiently take place between Intercounty and RMU. I have
 14 also presented additional technical information which the Commission can use in making
 15 their decision.
- 16 Q. Does this conclude your direct testimony?
- 17 A. Yes, at this time.

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STATE OF MISSOURI)
) ss
COUNTY OF PHELPS)

Rodney P. Bourne, of lawful age, being first duly sworn upon his oath states that he has read the foregoing document and the statements contained therein are true and correct to the best of his knowledge, information and belief.

Rodney P. Bourne

Subscribed and sworn to before me this sixteenth day of May, 2000.

Notary Public

THOMAS W. WASSILAK Notary Public-Notary Seal State of Missouri Phelps Counit

My Commission Expires Aug 30, 2000

(Seal)

NONPROPRIETARY SCHEDULE RB-1

				R	EVENUE	TOTAL REVENUE		
	Current IECA Member	Map Lo	cation	July 98	Aug 98	July '97-Aug '98	July '97-June '98	
					_	(14 mos)	(12 mos)	
**								
**		* 1213-		\$104.8		\$1,200.10	\$939.69	
**		1213-		\$133.8	2 \$148.94	\$1,378.76	\$1,096.00	
**		1210				\$85.18	\$85.18	
**		1215		£37 0	2 64044	\$34.39	\$34.39	
**		* 1213-		\$37.93 \$86.30		\$189.38 \$1,834.58	\$103.34	
**	*	1213-		\$14.5	•	\$208.28	\$1,649.13	
**	*	* 1213-		\$40.3		\$672.31	\$179.52 \$587.60	
**	*	* 1214-		\$ 7 0 .5.	U U -14.30	\$1,095.41	\$1,095.41	
**	*	1214		\$107.9	0 \$81.98	\$518.70	\$328.82	
**	*	* 1214-		\$61.10		\$608.61	\$484.37	
**	*	• 1214-		\$86.8		\$813.81	\$663 .57	
**	*	* 1214-	0005	\$87.7	0 \$57.00	\$1,368.86	\$1,224.16	
**		* 1214-	0017			\$505.09	\$505.09	
**		* 1214-		\$155.6		\$440.35	\$185.13	
**		* 1214-		\$121.9		\$1,276.23	\$1,014.10	
**		* 1214-		\$87.0		\$782.07	\$615.95	
**		1214-		\$31.9		\$1,102.04	\$1,043.20	
**		1214		\$50.67		\$788.65	\$683.15	
**		1214-		\$140.2		\$1,402.48	\$1,126.79	
**		1214		\$71.7		\$822.45	\$664.00	
**		* 1214- * 1214-		\$118.2		\$1,310.07 \$4,493.00	\$1,077.21	
**		* 1214-		\$94.94 \$176.48		\$1,183.96 \$1,530.54	\$959.52 \$4.473.03	
**	*	* 1214-		Ψ170.40	J 4171.15	\$1,520.54 \$300.67	\$1,172.93 \$300.67	
**	*			\$78.6	3 \$66.16	\$395.19	\$250.40	
**	*			\$114.9		\$1,036.30	\$825.14	
**	*			\$133.83		\$1,318.25	\$1,032.25	
**	•	* 1214-	0134			\$82.24	\$82.24	
**	•	* 1214-	0134	\$98.0	2 \$112.27	\$1,552.96	\$1,342.67	
**	*	1214		\$297.98	8 \$181.34	\$3,562.60	\$3,083.28	
**	*	1214-		\$130.6		\$1,887.41	\$1,628.41	
**	*	1217		\$70.3		\$997.40	\$832.08	
**	*	1217		\$94.1		\$816.92	\$615.97	
**	*	1214		\$121.02		\$1,274.00	\$1,025.48	
**	**	1414-		\$142.46		\$1,479.96	\$1,231.76	
RÁ	•	1214		\$55.53 \$75.77	•	\$657.90	\$547.48	
**	*			\$131.17		\$852.02 \$1,931.86	\$691.52 \$1,656.07	
**				\$89.6		\$743.77	\$557.83	
nA	*			\$68.97		\$852.96	\$701.52	
**	*			\$110.38		\$1,250.17	\$1,017.15	
**	*			\$83.5		\$882.43	\$701.94	
ri#	*	* 1214-	0158	\$17.32		\$357.73	\$326.61	
**	*	* 1214-	0159	\$99.26	5 \$114.38	\$1,687.72	\$1,474.08	
**	*	1214-	0160	\$53.86	3 \$55.66	\$622.00	\$512.48	
**	*	1214-		\$82.74		\$908.07	\$737.90	
**	*	12 14-		\$120.10		\$1,315.06	\$1,076.21	
**	*	1214		\$11.50		\$34.50	\$11.50	
**	*	14-		\$114.38		\$2,147.80	\$1,914.72	
**	*	1214-		\$83.65	• • • • • • • • • • • • • • • • • • • •	\$751.76	\$591.31	
**	*	1214-		\$71.28		\$1,116.96	\$954.79	
**	*	14,14-		\$141.49 \$109.41		\$1,159.95 64.252.74	\$881.18	
		1214-	U 13Z	ψ1U5.4	1 \$121.62	\$1,252.74	\$1,021.71	

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SCHEDULE RB-1 - page 2		OE. II	- h 11 4/-	TOTAL BEVELUE		
Current Member	Adam I acabia-		ENUE		REVENUE	
Current Member	Map Location	July 98	Aug 98	July '97-Aug '98	July '97-June '98	
		•		(14 mos)	(12 mos)	
*** ***	1214-0198	\$81.98	¢77.66	94 E00 00	04.040.50	
** **		\$49.90	\$77.66 \$65.26	\$1,500.20	\$1,340.56	
***	1214-0204	\$105.74	\$52.46	\$1,226.04 \$2,430.04	\$1,110.88	
**		\$97.10	\$103.58	\$2,130.84 \$2,005.24	\$1,972.64 \$1,804.56	
** **		\$118.38	\$130.58	\$1,419.94		
**		\$105.74	\$125.18	\$2,266.60	\$1,170.98 \$2,035.68	
**		\$110.06	\$120.86	\$1,667.64	\$1,436.72	
市外		\$103.58	\$70.38	\$1,349.72	\$1,175.76	
大力		\$125.18	\$151.10	\$2,108.52	\$1,832.24	
治狗		\$133.82	\$118.70	\$1,696.36	\$1,443.84	
**		\$79.82	\$127.34	\$1,540.84	\$1,333.68	
**		\$72.94	\$60.14	\$1,164.04	\$1,030.96	
**		\$133.82	\$228.16	\$2,300.46	\$1,938.48	
## ##		\$183.50	\$239.66	\$1,927.48	\$1,504.32	
**		\$136.79	\$133.77	\$1,415.93	\$1,145.37	
**	1214-0223	\$92.78	\$116.54	\$1,828.12	\$1,618.80	
** **	1214-0225	\$65.26	\$65.26	\$1,556.22	\$1,425.70	
· · · · · · · · · · · · · · · · · · ·	1214-0250	\$101.42	\$116.54	\$1,226.84	\$1,008.88	
*************************************	12 17-0201	\$105.74	\$142.46	\$1,629.40	\$1,381.20	
**	12 14-0200	\$146.78	\$196.46	\$2,076.52	\$1,733.28	
**	12 14-0201	\$49.62	\$75.22	\$871.08	\$746.24	
**	12 14-0230	\$16.75	\$14.83	\$43.08	\$11.50	
**	1214-0209	\$146.02	\$141.33	\$2,335.03	\$2,047.68	
- ^	1214-0249			\$64.17	\$64.17	
	1214-0249	\$60.27	\$69.61	\$964.77	\$834.89	
	1214-0250	\$110.06	\$107.90.	•	\$1,072.32	
** **	1214-0251	*440.00	****	\$346.56	\$346.56	
**	1214-0201	\$112.22	\$131.66	\$1,098.44	\$854.56	
** **	12 17-0204	\$115.30 \$82 .57	\$158.50	\$1,912.28	\$1,638.48	
***	1214-0201	\$1,298.25	\$90.62 \$1,476.09	\$989,23	\$816.04	
5 7 **		\$119.83	\$110.49	\$18,110.27 \$1,847.71	\$15,335.93 \$1,617.30	
** **		\$65.84	\$63.53	\$868.45	\$1,617.39 \$739.08	
** **		\$116.05	\$159.20	\$1,192.00	\$91 6 .75	
**		\$131.39	\$116.32	\$1,740.80	\$1,493.09	
** **		\$139.38	\$132.90	\$1,958.92	\$1,686.64	
分大 电大	1214-0288	\$70.19	\$67.31	\$1,235.67	\$1,098.17	
₹¢ ₹ k	1214-0289			\$36.08	\$36.08	
) 	1214-0289			\$76.58	\$76.58	
**	12 14-0209	\$65.32	\$95.64	\$668.47	\$507.51	
*************************************	12 14-0250	\$72.62	\$66.60	\$737.85	\$598.63	
9-4 WA	12 14-029 1	\$159.74	\$183.50	\$2,026.84	\$1,683.60	
	1214-0232	\$98.02	\$98.02	\$932.04	\$736.00	
	1214-0234	\$12.14	\$12.14	\$133.61	\$109.33	
**	1223-0001	\$602.54	S537.74	\$6,593.08	\$5,452.80	
*** ***	1223-0002	\$16.62	\$15.40	\$230.69	\$198.67	
** **	1223-0003 1223-0005	\$41.26 £472.70	\$35,31	\$576.98	\$500.41	
** **		\$172.70 \$106.63	\$140.30	\$2,430.84	\$2,117.84	
**	1223-0007 1223-0019	\$186.63	\$180.48	\$2,033.22 \$217.09	\$1,666.11 \$217.00	
*** ***	1223-0019	\$48.36	\$43.63	\$217.09 \$610.40	\$ 217.09 \$ 518.41	
## ##	1223-0019	\$168.81	\$166.33	\$1,886.76	\$1,551.62	
**	1223-0024	\$59.12	\$59.18	\$761.78	\$643.48	
**	1223-0025	\$50.60	\$39.85	\$482.80	\$392.35	
** **	1223-0026	\$103.36	\$109.30	\$889.13	\$676.47	
**	1223-0030	\$114.65	\$108.66	\$1,015.96	\$792.65	
	•			. ,	ND	

ROLLA UTILITIES

SCHEDULE RB-1 - page 3				TOTAL DELICATION	
			ENUE	TOTAL REVENUE	
Current Member	Map Location	July 98	Aug 98	•	July '97-June '98
				(14 mos)	(12 mos)
	•				
*** **	1223-0001	\$62.70	\$67.82	\$1,177.32	\$1,046.80
**	1220-0001	\$65.26	\$65.26	\$824.04	\$693.52
**	1223-0033	\$44.52	\$54.32	\$519.91	\$421.07
A A A	1223-0043	\$72.94	\$84.14	\$1,222.04	\$1,064.96
**	* 1223-0045	S113.14	\$130.20	\$1,809.11	\$1,565.77
**	1223-0046	\$90.40	\$111.03	\$1,047.18	\$845.75
**	* 1223-0047	\$136.63	\$114.70	\$1,045.42	\$794.09
**	* 1223-0049	\$120.86	\$138.14	\$1,638.04	\$1,379.04
** **	1220-0002	\$129.50	\$139.76	\$1,410.98	\$1,141.72
## #	1220-0000	\$86.30	\$72.94	\$97 5.72	\$816.48
44	1220-000-			\$127.00	\$127.00
**	1220-000-7			\$692.96	\$692.96
nin h	1220-0000	\$104.96	\$135.49	\$1,134.31	\$893.86
**	1220-0004	\$134.52	\$102.50	\$1,157.89	\$920.87
## **	1220-0000			\$572.34	\$572.34
*** **** *****************************	1220-0000	\$84.14	\$120,86	\$737.18	\$532.18
**	.220-0007	\$1,467.95	\$1,874.91	\$27,065.69	\$23,722.83
**	* 1223-0068	\$57.90	\$59.56	\$754.91	\$637,45
**	1220-0070	\$37.80	\$34.03	\$517.53	\$445.70
**	1220-007			\$16.56	\$16,56
**	1220-007			\$19.50	\$19.50
**	1223-0011			\$147.60	\$147.60
** *	122,0 007	- 4 4		\$47.31	\$47.31
	1223-0011	\$44.59	\$40.30	\$133.23	\$48.34
**	1220-0072	\$66.67	\$54.57	\$634.80	\$5.13.56
**	1220-0010			\$76.04	\$76.04
**	1220-0010	\$170.97		\$1,177.32	\$1,006.35
** ** *	1223-0013			\$290.36	\$290.36
	1223-0075	\$25.71	\$98.40	\$135.61	\$11.50
	1223-0076			\$503.46	\$503.46
	* 1223-0076	****		\$55.50	\$55.50
	1223-0076	\$220.81	044.50	\$441.04	\$220.23
	1223-0076	6400.40	\$11.50	\$11.50	\$0.00
	* 1223-0080 * 1223-0082	\$123.40	\$102.72	\$1,849.67	\$1,623,55
	1225-0002	\$69.23	\$72.30	\$1,225.76	\$1,084.23 ************************************
	1220 0000	\$102.77	\$135,93	\$1,160.05	\$921.35
· ·	1223-0000	\$29.55	\$17.32	\$206.04	\$159.17
**	1223-0000	\$75.61	\$70.70	\$1,171.67	\$1,025.36
**	* 1223-0096 * 1223-0096			\$920.87 \$114.92	\$920.87
	1220-0000				\$114.92
	1225-0030	6470.42	0140.46	\$508.58 \$354.00	\$508.58 511.50
	1220-0090	\$129.12	\$113,46	\$254.08	\$11.50
· ·	1223-0051	\$55.02	\$55.53	\$966.03	\$855.48
	1223-0013	\$306.62	\$241.82	\$4,698.76	\$4,150.32
	1223-0123	\$198.62	\$263.42	\$3,839.18	\$3,377.14
·	1223-0140		•	\$101.20	\$101.20
	* 1223-0148 * 1223-0148	#440.00	0400.00	\$297.12	\$297.12
	12200170	\$110.98	\$106,66	\$236.54	\$18.90
	1223-0132	\$140.30 \$57.58	\$110.06	\$1,289.32 \$1,180.44	\$1,038.96 \$1,066.56
, and the second se		\$57.58	\$56.30	\$1,180.44	\$1,066.56 \$1,436.14
	1223-0130	\$136.58	\$126.64	\$1,699.36 \$1,305.55	\$1,436.14 \$1,436.63
,	1220-0170	\$87.81	\$79.12	\$1,295.55	\$1,128.62
	1225-0100	\$244.90	\$318.34	\$3,781.04	\$3,217.80
	1220-0101	\$45.36	\$88.41	\$1,555.68	\$1,421.91 \$1,46.76
	1223-0193	\$157.58	\$159.74	\$1,463.08	\$1,145.76
	1223-0194	\$22.89	\$25.64	\$290.79	\$242.26
•	1223-0195	\$85.92	\$199.00	\$1,987.52	\$1,702.60

SCHEDULE RB-1 - page 4		REVENUE		TOTAL REVENUE		
Current Member	Map Location	July 98	Aug 98		July '97-June '98	
ourion Wember	Map Location	July 50	Aug 90	(14 mas)	(12 mos)	
		•		(14 mas)	(/Z //ica/	
**	1223-0197	\$862,66	\$1,108.90	\$14,600.12	\$12,628.56	
nk	1223-0199	\$128.26	\$149.86	\$2,590.52	\$2,312.40	
*** 4 5	1223-0200			\$3,039.30	\$3,039.30	
上大	1223-0200	\$34.54	\$37.10	\$110.00	\$38.36	
AR AN	1220-0202	67.82	\$125.18	\$1,878.04	\$1,685.04	
AR AN	1223-0204	1151.18	\$1,021.58	\$11,727.40	\$9,554.64	
tinit the think	1223-0203	457.82	\$896.30	\$6,927,88	\$5,573.76	
Print Mark	1223-0200	127.34	\$135.98	\$1,263.16	\$999.84	
ark Ark	1223-0214	49.62	\$44.50	\$607.64	\$513.52	
AR to	1220-0213	55.47	\$55.21	\$1,002.96	\$892.28	
** **	1223-0210	3750.9	\$340.10	\$7,112.83 \$4,700.37	\$3,021.83	
An An	1220-0225	78.31 25.13	\$99.15 \$26.92	\$1,700.37 \$428.50	\$1,522.91 \$376.45	
AN AN	1220-0220	25.15	\$20.92	\$126.20	\$376.45 \$126.20	
**				\$120.20	\$120.20 \$190.95	
** Add				\$11.50	\$11.50	
** **		\$75.44	\$64.43	\$293,73	\$153.86	
** **		\$88.68	\$89.65	\$1,541.71	\$1,363.38	
** **		\$28.95	\$29.40	\$425.64	\$367.29	
· 大秀		\$31.98	\$26.86	\$445.16	\$386.32	
**				\$220.19	\$220.19	
At the second	1223-0231			\$16.04	\$16.04	
NA AS	1223-0231	\$32.56	\$35.31	\$67.87	\$0.00	
**	1223-0235	\$114.00	\$116.86	\$1,580.84	\$1,349.98	
**	1220-0240	\$91.11	\$108.66	\$1,434,56	\$1,234.79	
** Ari	1225-02-1			\$155.47	\$155.47	
Note And	1223-0241	\$141.11	\$141.60	\$2,231,51	\$1,948.80	
	1225-02-72			\$1,065.26	\$1,065.26	
	1225-0242	\$11.50	\$44.08	\$67.08	\$11.50	
Arts Arts	1220-0240	000.70	040.04	\$428.91	\$428.91	
*** ***	1223-0243	\$23.79	\$16.24	\$73.14	\$33.11	
**	1220-0244	\$93.43	\$76.58	\$812.39	\$642.38	
** **	1223-0243	\$124.26 \$59.86	\$62.96 \$70.10	\$1,206.02	\$1,018.80	
**	1223-02-0	\$11.50	\$195.87	\$1,113.64 \$2,042.96	\$983.68 \$1.835.50	
**		\$43.50	\$53.10	\$557.80	\$1,835.59 \$461.20	
KA ps		\$24.75	\$28.59	\$311.33	\$257.99	
** <u>*</u>		\$37.23	\$36.46	\$505.58	\$431.89	
xx Ax	1224-0005	\$39.79	\$48.62	\$454.17	\$365.76	
A± +d		\$413.38	\$200.00	\$6,293.52	\$5,680.14	
ANK AN		\$215.90	\$196.46	\$1,776.84	\$1,364.48	
Andre Stell	1224-0014	\$25.84	\$26.86	\$404.15	\$351.45	
**	1224-0017	\$82.47	\$78.63	\$1,002.31	\$841.21	
## gr	1224-0020	\$56.8 8	\$50,99	\$643.08	\$535.21	
** ## ##	1224-0023	\$100.18	\$113.95	\$1,833.10	\$1,618.97	
tink and	1224-0000	\$155.42	\$174.37	\$1,566.29	\$1,236.50	
Ark Ari	1224-0007	\$224.05	\$209.53	\$3,002.63	\$2,5 69.05	
•••	1224-0040	\$105.63	\$126.26	\$1,163.82	\$93 1.93	
	1224-0005	\$49.90	\$79.82	\$1,409.96	\$1,280.24	
	1224-0003	\$19.09	\$19.09	\$308.25	\$270.07	
	1224-0073	\$49.90	\$94.94	\$1,008.04	\$863.20	
** ** ***	1224-0000	´ \$38.44	\$48.56	\$5 63.77	\$476.77	
7-1 243 3-14 443	1224-0003	\$12.01	\$11.56	\$181.85	\$158.28	
**** *********************************	1224-0090	\$18.90	\$18.90	\$1,011:40	\$973.60	
**	1010-0000	\$89.54 \$64.36	\$90.62 \$62.19	\$1,033.37	\$853.21 \$742.80	
Aw gri	1310-0000	\$148.94	\$127.34	\$869.35 \$2,007.40	\$742.80 \$1,731.12	
*** ***	1010-0001	ψ 14U,34	Ψ1Z1.34	\$1,275.80	\$1,731.12 \$1,275.80	
	1010-000			Ψ1,275.00	₩1,210.00	

	ocineboee RB-1 - page 8		,	REVE	NII IE	TOTAL	REVENUE
	Current Member		Map Location	July 98	Aug 98	July '97-Aug '98	July '97-June '98
				ouly oo	, lug oo	(14 mos)	(12 mos)
				•		(14 11100)	(1211100)
**		A &	1318-0009	\$187.82	\$153.26	\$531.66	\$190.58
**		**	1318-0010	\$69.10	\$75.50	\$ 760. 0 4	\$615.44
**		**	1318-0011	\$60.08	\$58.80	\$692.07	\$573.19
**		**	1318-0013	\$8 5. 38	\$97.26	\$930.55	\$747.91
**		**	1318-0014	\$90. 6 2	\$21.74	\$1,734.76	\$1,622.40
**		**	1318-0015	\$64.43	\$82.90	\$1,733.75	\$1,586.42
**		**	1318-0017	\$72.49	\$106.77	\$1,082.74	\$903.48
**		**	1318-0018	\$59.44	\$74.22	\$749.90	\$616.24
**		**	1318-0019	\$159.74 \$453.26	\$110.06	\$1,756.84	\$1,487.04
**		**	1318-0020 1318-0021	\$153,26 \$106.39	\$170.54	\$2,238.70	\$1,914.90
**		**	1318-0021	\$100.39	\$107.95 \$106.44	\$989.80 \$1,213.51	\$775.46
Ark		**	1318-0022	\$110.28	\$100.44		\$968,34
**		**	1318-0025	\$200.78	\$127.00	\$1,437.75 \$2,533.48	\$1,199 .59 \$2,318.64
**		**	1318-0026	Ψ200.7 Q	Ψ1 4 ,00	\$381.82	\$381.82
**		**	1318-0026	\$151.10	\$123.02	\$1,462.12	\$1,188.00
**		**	1318-0027	\$97.10	\$94.94	\$2,020.36	\$1,828.32
**	•	**	1318-0028	\$107.90	\$82.78	\$1,811.64	\$1,620.96
**		**	1318-0029			\$371.54	\$371.54
**		**	1318-0029	\$123.02	\$114.38	\$1,071.36	\$833.96
**		**	1318-0030	\$81.98	\$81.98	\$1,957.24	\$1,793.28
**		**	1318-0031	\$226.43	\$251.97	\$2,706.22	\$2,227.82
**		**	1318-0034	\$129.50	\$131.66	\$1,903.72	\$1,642.56
**		**	1318-0035	\$185.66	\$131.66	\$2 ,607.88	\$2,290.56
**		**	1318-0036	\$142.46	\$101.42	\$2,257.96	\$2,014.08
**		**	1318-0037	\$148.94	\$157.58	\$2,186.68	\$1 ,880.16
**		**	1318-0039	\$112.22	\$125.18	\$2,072.20	\$1,834.80
**		**	1318-0040	\$291.50	\$269.90	\$3,776.44	\$3,215.04
**		##	1318-0042 1318-0053	\$114.38	\$151.10	\$1,338.60	\$1,073.12
**		大力	1318-0054	\$114.38 \$88.46	\$112.22 \$233.18	\$1,536.52 \$1,666.10	\$1,309.92 \$4,344.49
kk		##	1318-0063	\$88.46	\$99.26	\$1,666.12 \$1,867.00	\$1,344.48 \$1,679.28
××		大大	1318-0064	\$ 00.40	Q 33.20	\$1,380.10	\$1,380.10
**		**	1318-0064	\$142.46	\$155.42	\$421.60	\$123.72
**		**	1318-0084	\$135.98	\$185.66	\$2,785.00	\$2,463.36
**		**	1318-0085	\$79.82	\$72.94	\$1,440.60	\$1,287.84
48		**	1318-0093	\$136.95	\$125.18	\$2,382.69	\$2,120.56
##		**	1318-0095	\$144.62	\$158.66	\$2,259.58	\$1,956.30
**		**	1318-0096	\$135.90	\$110.06	\$1,837.64	\$1,591.68
**		**	1318-0111	\$113.52	\$124.10	\$1,926.72	\$1,689.10
**		**	1318-0124	\$77.77	\$85.49	\$979.29	\$816.03
**		**	1318-0125	\$170.54	\$183.50	\$1,875.78	\$1,521.74
**	•	**	1318-0126	\$237.50	\$129.50	\$2,029.00	\$1,662.00
**		**	1318-0130	\$187.82	\$123.02 \$75.24	\$2,711.56	\$2,400.72
**		**	1318-0133 1318-0134	\$73.52 \$174.86	\$75.31 \$174.96	\$1,103.18 \$2,674.84	\$954.35
**		**	1318-0135	\$23.34	\$174.86 \$15.72	\$2,674.84	\$2,325.12
**		**	1318-0138	\$147.16	\$118.65	\$363.97 \$2,801.28	\$324.91
**		**	1318-0139	Ψ171.10	¥110.00	\$284.22	\$2,535.47 \$284.22
##		**	1318-0139			\$141.78	\$141.78
**		**	1318-0139	\$80.68	\$89.97	\$419.02	\$141.78 \$248.37
**		**	1318-0140	\$112.65	\$115.35	\$1,703.54	\$1,475.54
**		**	1318-0141	\$135.98	\$129.50	\$2,378.92	\$2,113.44
**	,	##	1318-0146	\$100.50	\$112.44	\$1,861.76	\$1,648.82
**		**	1318-0150	\$95.64	\$107.04	\$1,509.53	\$1,306.85
**	•	4#	1318-0153	\$140.30	\$159.47	\$2,111.99	\$1,812.22
						•	NID

ROLLA UTILITIES

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NONPROPRIETARY SCHEDULE RB-1 - page 6

,		•	REVENUE		TOTAL REVENUE		
Current M	lember	Map Location	July 98	Aug 98	July '97-Aug '98	July '97-June '98	
					(14 mos)	(12 mos)	
**	**	1318-0155	\$114.97	\$128.58	\$1,656.14	\$1,412.59	
**	##	1318-0157	\$58.86	\$94.29	\$1,154.10	\$1,000.95	
**	##	1318-0158	\$77.61	\$57.07	\$1,006.94	\$872.26	
**	**	1318-0160	\$112.44	\$152.94	\$1,650.91	\$1,385.53	
**	**	1318-0161	\$119.40	\$108.66	\$1,137.81	\$909.75	
**	**	1318-0164	\$24.30	\$28.78	\$587.82	\$534.74	
**	**	1319-0002	\$60.14	\$75.50	\$1,062.28	\$926.64	
**	that .	1319-0005	\$22,12	\$11.63	\$389.27	\$355.52	
**	**	1319-0011	\$79.82	\$103.58	\$1,768.60	\$1,585,20	
**	**	1319-0012	\$70.38	\$97.10	\$893.72	\$726.24	
**	**	1319-0024	\$49.90	\$67.82	\$818.92	\$701.20	
**	**	1319-0027			\$1,456.96	\$1,456.96	
**	##	1319-0027	\$65.26	\$97.10	\$173.86	\$11.50	
**	**	1319-0028	\$147,70	\$159.47	\$2,026.36	\$1,719.19	
AR .	AA	1319-0041	\$142.57	\$130.15	\$1,706.78	\$1,434.06	
**	**	1319-0045	\$38.32	\$26.54	\$459.39	\$394.53	
**	**	1319-0047	\$36.72	\$34.22	\$493.80	\$422.86	
**	**	1319-0049	\$156.55	\$179.94	\$2,517.64	\$2,181.15	
Total Revenue			\$34,406.93	\$32,408.92	\$437,279.30	\$370,463.45	

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FEASIBILITY STUDY

FOR THE

ACQUISITION OF IECA FACILITIES

IN THE

ROLLA SOUTHSIDE ANNEXATION AREA

May, 2000



ROLLA MUNICIPAL UTILITIES 102 WEST 9TH STREET P.O. Box 767 ROLLA, MISSOURI 65402-0767

FEASIBILITY STUDY FOR THE ACQUISITION OF IECA FACILITIES IN THE ROLLA SOUTHSIDE ANNEXATION AREA

May, 2000

INTRODUCTION

Rolla Municipal Utilities (RMU) has filed with the Missouri Public Service Commission (PSC) under RSMO 386.800 for RMU to purchase the electrical facilities and customers of Intercounty Electric Cooperative Association (IECA) in a recently annexed area of the City of Rolla.

The intent of this feasibility study is for RMU to present a plan which will address the following issues:

- 1. Describe the upgrades which will be required of the procured <u>IECA facilities</u> in order for RMU to be able to utilize these pole lines.
- 2. Estimate the cost associated with upgrading the IECA facilities.
- 3. Describe the upgrades which will be required of the <u>RMU system</u> to support the addition of the Southside Annexation Area (Area) customers.
- 4. Estimate the cost associated with upgrading the RMU facilities.
- 5. Propose a timetable for the switch over from IECA to RMU.
- 6. Outline a procedure for transferring the IECA customers to the RMU system.
- 7. Provide a table of estimated expenditures and revenues for a 3 year period.
- 8. Provide information on any financing that would be required for this project.
- 9. Provide information regarding anticipated rate changes or fees that would be required of the new RMU customers.

For the purposes of this study, <u>RMU is assuming</u> that the PSC will render a judgement in favor of awarding the IECA facilities and customers located within the Area to RMU, <u>and</u> that a joint pole contact agreement will be implemented between IECA and RMU for tie lines.

A map of the Area has been included as <u>APPENDIX C</u>.

1. INTERCOUNTY ELECTRIC COOPERATIVE ASSOCIATION FACILITY UPGRADES

This section will discuss in detail the upgrades that RMU will be required to make to the existing IECA facilities in order for RMU to successfully serve the IECA members. RMU estimates this expense at \$283,323.12.

IECA operates several trunk distribution lines that traverse through the Area. These trunk lines

serve as ties between the following IECA substations: East Rolla, South Rolla, and Dry Fork Substations. IECA serves its members in the Area via branch lines from the main trunk lines or via taps directly from the trunk lines. IECA operates its electric lines at 12.47kV.

In an attempt to simplify the analysis, RMU intends to discuss the Southside Annexation Area in three distinct areas:

- East Area (The area located between State Route O and State Route 72).
- Central Area (The area located between Rolla Street and State Route O).
- West Area (The area located west of Rolla Street).

In addition, RMU only plans to discuss the IECA facilities that will require upgrades in order for RMU to serve the customers in the Area.

- 1.A. IECA has the following facilities in the East Area that will require upgrades by RMU:
 - 1.A.1. IECA operates a double circuit three-phase line which originates at the East Rolla Substation. The double-circuit pole line enters into the area from the north, and exits into the Central Area. The double-circuit lines were originally operated by Sho-Me Power as transmission lines. When IECA assumed control of the lines, the voltage was reduced to 12.47kV, and presently the lines are used for distribution purposes.

RMU plans to replace the existing poles with taller poles which will allow joint construction of the IECA lines and an RMU distribution line. RMU will also install additional poles to reduce span lengths. RMU proposes that the IECA double circuits be located at the top of the new poles. RMU will extend a three-phase, 336.4 Aluminum Conductor, Steel Reinforced (ACSR) distribution line from the RMU Dewing substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multi-phase taps will then be served from the RMU line.

1.A.2. IECA operates a three-phase line in the East Area which is a tie between the East Rolla and Dry Fork Substations. This IECA circuit taps the double-circuit line described in item 1.A.1., and exits out of the East Area in a southerly direction. IECA operates the line at 12.47kV, and the lines are used for distribution purposes.

RMU plans to replace the existing poles with taller poles which will allow joint construction of the IECA line and an RMU distribution line. RMU will also install additional poles to reduce the span lengths between poles. RMU proposes that the IECA circuit be located at the top of the new poles. RMU will extend a three-phase, 336.4 ACSR distribution line from the RMU Dewing substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multiphase taps will then be served from the RMU line.

1.A.3. IECA operates a single-phase line in the East Area. The single-phase circuit taps the

three-phase line described in item 1.A.2., and extends to the eastern edge of the East Area. The Longview Subdivision and two additional residences are supplied from this line. IECA operates the line at 12.47kV, and the line is used for distribution purposes.

RMU plans to replace the existing poles with taller poles to allow construction of a RMU line which will have a higher clearance above the ground. RMU will also install additional poles to reduce span lengths. RMU will extend a three-phase, 336.4 ACSR distribution line from the RMU Dewing substation along the new pole line. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multi-phase taps will then be served from the RMU line. The original IECA single-phase line will be removed.

- 1.B. IECA has the following facilities in the Central Area that will require upgrades by RMU:
 - 1.B.1. The IECA double circuit three-phase line discussed in Item 1.A.1. enters into the Central Area from the east, and separates approximately 1280 feet into the Central Area. IECA operates the line at 12.47kV, and the lines are used for distribution purposes.

RMU plans to replace the existing poles with taller poles which will allow joint construction of the IECA lines and an RMU distribution line. RMU will also install additional poles to reduce span lengths. RMU proposes that the IECA double circuits be located at the top of the new poles. RMU will extend the three-phase, 336.4 ACSR distribution line from the RMU Dewing substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multi-phase taps will then be served from the RMU line

1.B.2. The double-circuit line mentioned in Item 1.B.1 separates in the Central Area. One of the three-phase circuits exits the Central Area to the south and serves as a tie to the South Rolla Substation. The other three-phase circuit continues westerly, and enters the West Area at the intersection of Rolla Street and Lions Club Drive. IECA operates both lines at 12.47kV, and the lines are used for distribution purposes.

RMU plans to replace the existing poles in these two lines with taller poles which will allow joint construction of the IECA line and an RMU distribution line. RMU will also install additional poles to reduce the span lengths between poles. RMU proposes that the IECA circuits be located at the top of the new poles. RMU will extend the three-phase, 336.4 ACSR distribution line from the RMU Dewing Substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multi-phase taps will then be served from the RMU line.

1.B.3. IECA operates a 12.47kV three-phase line which runs along the East side of Rolla Street north of Lions Club Drive. A large percentage of this line is constructed in joint contact with an RMU 4.16kV three-phase line. The RMU line serves existing

subdivisions along the East side of Rolla Street. Service lines, single-phase taps, and multi-phase taps will be transferred and served from the RMU line.

RMU will replace the transformers supplying the IECA members in the Shady Lane Subdivision Area. This is discussed in greater detail in Section 3.C.

- 1.B.4. IECA operates a two-phase line which runs along the East side of Rolla Street from Lions Club Drive to Little Oaks Drive. RMU operates a three-phase line on the West side of Rolla Street. RMU will serve the customers located along this portion of Rolla Street by extending the service lines across Rolla Street and connecting them to the existing RMU three-phase line. The RMU line will be upgraded from 4.16kV to 12.47kV. The IECA line will be removed.
- 1.C. IECA has the following facilities in the West Area that will require upgrades by RMU:
 - 1.C.1. One of the single-phase circuits mentioned in Item 1.B.2. enters the West Area on the east and exits on the west side of the West Area. This line is routed along Lions Club Drive and serves as a tie to the South Rolla Substation. IECA operates this line at 12.47kV and the line is used for distribution purposes.

RMU plans to replace the existing poles in this line with taller poles which will allow joint construction of the IECA line and an RMU distribution line. RMU will also install additional poles to reduce the span lengths between poles. RMU proposes that the IECA circuits be located at the top of the new poles. RMU will route a three-phase, 336.4 ACSR distribution line from the RMU Ft. Wyman Substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multi-phase taps will then be served from the RMU line.

1.C.2. IECA operates a three-phase line in the West Area which is a tie to the South Rolla Substation. The IECA line is routed behind the businesses on the east side of Bishop Avenue. The IECA circuit taps the three-phase line described in Item 1.C.1. and exits out of the West Area in a southerly direction. IECA operates the line at 12.47kV and the lines are used for distribution purposes.

RMU plans to replace the existing poles with taller poles which will allow joint construction of the IECA line and an RMU distribution line. RMU will also install additional poles to reduce the span lengths between poles. RMU proposes that the IECA circuit be located at the top of the new poles. RMU will extend the three-phase, 336.4 ACSR distribution line from the RMU Ft. Wyman Substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multiphase taps will then be served from the RMU line.

1.C.3. IECA operates a three-phase line in the West Area which serves the properties located on the north side of Little Oaks Drive. This IECA circuit taps the three-phase

line described in Item 1.C.2. and eventually serves customers located on Rolla Street south of the Annexation Area. IECA operates the line at 12.47kV and the lines are used for distribution purposes.

RMU plans to replace the existing poles with taller poles which will allow joint construction of the IECA line and an RMU distribution line. RMU will also install additional poles to reduce the span lengths between poles. RMU proposes that the IECA circuit be located at the top of the new poles. RMU will extend the three-phase, 336.4 ACSR distribution line from the RMU Ft. Wyman Substation. The RMU circuit will be operated at 12.47kV. Transformers, service lines, single-phase taps, and multiphase taps will then be served from the RMU line.

1.C.4. IECA operates a three-phase line which runs behind the businesses along the west side of Bishop Avenue from Lions Club Drive to Hartville Road. RMU proposes to leave this line as property of IECA. RMU will serve these customers from a line to be constructed along Bishop Avenue to be discussed in a later Section.

2. ESTIMATED COSTS ASSOCIATED WITH IECA FACILITY UPGRADES

Please refer to <u>APPENDIX A</u> which is a table of RMU's estimated costs required to make the improvements to the IECA facilities as described in Section 1.

3. ROLLA MUNICIPAL UTILITIES FACILITY UPGRADES

This section will discuss in detail the upgrades that RMU will make to the existing RMU facilities in order for RMU to successfully serve the IECA members. RMU estimates this expense at \$117,990.68.

- 3.A. The East Area facilities will be supplied from the Dewing Substation. The Dewing Substation is served from a 5MVA transformer with a distribution voltage of 12.47kV. The station currently is loaded to approximately 300kVA. RMU will utilize two existing circuits from this substation to serve the Area. RMU does not anticipate any additional upgrades to serve the East area
- 3.B. The Central Area facilities will be served through an extension of the Dewing Substation circuits from the East Area. The operating voltage of existing RMU lines in the Central Area will be changed from 4.16kV to 12.47kV. The existing lines were initially constructed to be operated at 12.47kV, therefore RMU does not anticipate any additional upgrades to serve the Central Area.
- 3.C. RMU has the following facilities in the West Area that will require upgrades:

- 3.C.1. The West Area facilities will be supplied from the Ft. Wyman Substation. The Ft. Wyman Substation is served by a 10/12.5MVA transformer with a distribution voltage of 4.16kV. The station currently is loaded at approximately 3 to 5MVA. Initially, RMU will utilize a single circuit from this substation to serve the West Area RMU will install a 4.16-12.47kV step-up transformer on this dedicated circuit to achieve the required distribution voltage.
- 3.C.2. RMU will construct a 12.47kV overhead line from the Ft. Wyman Substation to the intersection of Bishop Avenue and Lions Club Drive. This upgrade will require the installation of taller poles to allow joint construction with an existing RMU 4.16kV line. At the Bishop Avenue and Lions Club Drive intersection, the new RMU 12.47kV line will tie into the circuits discussed in Section 1.B.
- 3.C.3. A switch disconnect will be installed at the intersection of Lions Club Drive and Rolla Street. This switch will serve as a tie point between the Dewing and Ft. Wyman Substations.
- 3.C.4. RMU will construct an extension of the Wyman 12.47kV circuit along Bishop Avenue, from Lions Club Drive to Hartville Road, to serve customers located along the west side of Bishop Avenue. IECA currently serves these properties with a three-phase line located at the rear (west side) of the properties. It is RMU's intent to serve these properties by extending their services to the new RMU line on the East side of their property. RMU would not purchase the IECA line.
- 3.C.5. For IECA members located in the Shady Lane Subdivision Area, RMU will install dual-voltage transformers for each customer. This will allow RMU to supply the transformers from an existing line at 4.16kV.

4. ESTIMATED COSTS ASSOCIATED WITH RMU FACILITY UPGRADES

Please refer to <u>APPENDIX B</u> which includes a table of the estimated costs required to make the improvements to RMU facilities as described in Section 3.

5. TIMETABLE FOR SWITCH OVER

This section will discuss in detail a timetable that RMU has developed for the systematic transfer of customers from the IECA system to the new RMU electric distribution system. In summary, RMU believes that the transfer process will have a duration of approximately 18 to 24 months.

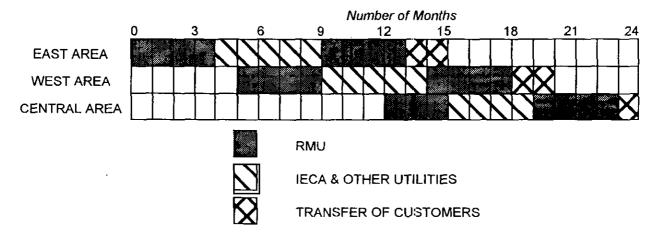
RMU plans to implement the required improvements beginning in the West Area where the density of IECA members is the highest. RMU will start the improvements by constructing the new RMU line from the Wyman Substation to supply the West Area. In addition, RMU will upgrade the poles described is Section 1.C. and 3.C. Once the taller poles have been installed in the IECA lines, IECA and other utilities with facilities on the old IECA poles will begin the transfer of facilities over to the new RMU poles. Once the transfer of existing facilities is completed, RMU will remove the old poles and extend the Wyman circuit along the new pole lines. The process of transferring customers over to the new RMU system will begin once the new RMU lines are energized. RMU anticipates that the first phase (West Area) of the project will take approximately 12 - 15 months to complete.

While RMU is waiting for IECA and the other utilities to transfer their facilities from the old poles to the new poles in the West Area, RMU will begin the installation of taller poles in the East Area. Once new poles have been set, the process of transferring facilities and construction of the RMU line will take place in a similar manner as the East Area. RMU anticipates that the second phase (East Area) of the project will take approximately 12 - 15 months to complete.

The third and final phase will be implemented in the Central Area. Similar to the first and second phases, while RMU is waiting for IECA and the other utilities to transfer their facilities from the old poles to the new poles in the West Area, RMU will begin the installation of taller poles in the Central Area. The process of transferring facilities and construction of the RMU line will be similar to the East and West Areas. There will only be a few customers remaining on the IECA system at this time. These customers are located along the west side of State Route O. RMU anticipates that the third phase (Central Area) of the project will take approximately 9 - 12 months to complete.

The total time frame for implementation of the process is anticipated to take 18 - 24 months. As described above, RMU expects that there will be some overlap between the different phases. The proposed timetable will also depend on the cooperation and availability of workers from all utilities involved in the transfer process.

The following is a graphic representation of our proposed timetable:



6. TRANSFER OF CUSTOMERS

As sections of the new RMU lines are energized, RMU envisions that an IECA and RMU crew will work in tandem to implement a process of disconnecting branch feeders or primary transformer feeds from the IECA lines and relocating these taps to the newly constructed RMU lines. At this time, the end electrical user would become a customer of RMU. The meters would be read at this time in order for IECA to prepare a final bill for its member. RMU would also read the meter to begin the billing cycle for the new RMU customer. This process of cut-overs would be implemented throughout the two year switchover period. Each customer will have a short outage during this transfer process that will last approximately 1 - 2 hours.

7. EXPENDITURES AND REVENUES

This section will discuss in detail the estimated expenditures and revenues projected over the next three years for the annexation area.

The expenses and revenues discussed in this section will deal primarily with the Annexation Area.

7.A. FIRST YEAR ESTIMATED EXPENSES AND REVENUE

During the first year RMU estimates the following expenses related to the Area:

One-half of the "fair & reasonable compensation"	\$967,325.22
West Area IECA Upgrades	\$109,183.75
One-half of the East Area IECA Upgrades	\$51,411.21
West Area RMU Upgrades	<u>\$117,990.68</u>
Total First Year Expenses	\$1,249,400.76

RMU does not anticipate any transfer of IECA customers to the RMU system until the end of the first year. Therefore, the revenue stream for the first year will be based on the addition of an estimated 20 new RMU customers in the Area with an average usage of 1000 kWH per new customer per month.

 I^{st} year revenue = 20 customers X 1000kWH x .06\\$/kWH X 12 Months = \\$14,400/year

7.B. SECOND YEAR EXPENSES AND REVENUE

During the second year RMU estimates the following expenses related to the Area:

One-half of the "fair & reasonable compensation"	\$967,325.22
Central Area IECA Upgrades	\$71,316.96
One-half of the East Area IECA Upgrades	\$51,411.20
Total Second Year Expenses	\$1,090,053.38

During the second year RMU estimates the following revenues related to the Area:

286 Former IECA Customers\$205,920.00Estimated 50 new RMU Customers\$36,000.00Total Second Year Revenues\$241,920.00

7.C. THIRD YEAR EXPENSES AND REVENUE

Since all estimated expenses associated with the switchover of the IECA members will have been paid prior to the third year, RMU has assumed no expenses related to the Annexation Area:

During the third year RMU estimates the following revenues related to the Area:

286 Former IECA Customers \$205,920.00
Estimated 80 new RMU Customers \$57,600.00
Total third Year Revenues \$263,520.00

8. FINANCING REQUIREMENTS

Please refer to the Direct Testimony of Mr. Dan Watkins, General Manager of Rolla Municipal Utilities, for detailed information regarding any financing required for completion of this project.

9. RATE CHANGES AND FEES

Please refer to the Direct Testimony of Mr. Dan Watkins, General Manager of Rolla Municipal Utilities, for detailed information regarding any rate changes or fees required for completion of this project.

SOUTHSIDE ANNEXATION AREA FEASIBILITY STUDY APPENDIX A

Costs to RMU associated with upgrading the current IECA facilities to accommodate additional RMU equipment.

East Area

	Line Section				Material	Labor	Total	
Description of Item	1A1	_1A2	1B3	not used	Cost	Cost	Cost	
40 foot wood pole					\$251.28	\$198.90	\$0.00	
45 foot wood pole			15		\$273.78	\$198.90	\$7,090.20	
50 foot wood pole					\$390.38	\$198.90	\$0.00	
55 foot wood pole	18	11			\$425.33	\$198.90	\$18,102.67	
60 foot wood pole	6	3			\$636.33	\$198.90	\$7,517.07	
65 foot wood pole	2	2	1		\$701.33	\$198.90	\$4,501.15	
70 foot wood pole	3				\$913.20	\$298.35	\$3,634.65	
75 foot wood pole	2				\$1,176.25	\$298.35	\$2,949.20	
80 foot wood pole	1				\$1,479.40	\$298.35	\$1,777.75	
Relocate Transformer	5		1		\$50.00	\$198.90	\$1,493.40	
Service Drop	7		1		\$150.00	\$99.45	\$1,995.60	
Single-Phase Tap	9	3	4		\$150.00	\$99.45	\$3,991.20	
Multi-Phase Tap	1				\$200.00	\$99.45	\$299.45	
336.4 ACSR	5320	2750	2780		\$1.48	\$1.50	\$32,333.00	
Subtotal							\$85,685.34	
20% Margin(for miscellaneous material & labor)							\$17,137.07	
Total \$1								

Notes:

Section 1A1 has 19 IECA poles, RMU will install approx. 32 poles to decrease the distance between spans. Section 1A2 has 10 IECA poles, RMU will install approx. 16 poles to decrease the distance between spans. Section 1A3 has 10 IECA poles, RMU will install approx. 16 poles to decrease the distance between spans.

SOUTHSIDE ANNEXATION AREA FEASIBILITY STUDY APPENDIX A

Costs to RMU associated with upgrading the current IECA facilities to accommodate additional RMU equipment.

Central Area

	Line Section				Material	Labor	Total	
Description of Item	1B1	1B2	1B3	1B4	Cost	Cost	Cost	
40 foot wood pole					\$251.28	\$198.90	\$0.00	
45 foot wood pole					\$273.78	\$198.90	\$0.00	
50 foot wood pole					\$390.38	\$198.90	\$0.00	
55 foot wood pole	8	35			\$425.33	\$198.90	\$26,841.89	
60 foot wood pole		2			\$636.33	\$198.90	\$1,670.46	
65 foot wood pole	T				\$701.33	\$198.90	\$0.00	
70 foot wood pole		1			\$913.20	\$298.35	\$1,211.55	
75 foot wood pole					\$1,176.25	\$298.35	\$0.00	
80 foot wood pole					\$1,479.40	\$298.35	\$0.00	
Relocate Transformer	1		1	8	\$50.00	\$198.90	\$2,489.00	
Service Drop	1		1	7	\$150.00	\$99.45	\$2,245.05	
Single-Phase Tap	2	3	3		\$150.00	\$99.45	\$1,995.60	
Multi-Phase Tap				1	\$200.00	\$99.45	\$299.45	
336.4 ACSR	1280	6330			\$1.48	\$1.50	\$22,677.80	
Subtotal							\$59,430.80	
20% Margin(for miscellaneous material & labor)							\$11,886.16	
Total \$7							\$71,31 6.96	

Notes:

Section 1B1 has 4 IECA poles, RMU will install approx. 8 poles to decrease the distance between spans. Section 1B2 has 25 IECA poles, RMU will install approx. 38 poles to decrease the distance between spans.

SOUTHSIDE ANNEXATION AREA FEASIBILITY STUDY APPENDIX A

Costs to RMU associated with upgrading the current IECA facilities to accommodate additional RMU equipment.

West Area

	Line Section				Material	Labor	Total
Description of Item	1C1	1C2	1C3	not used	Cost	Cost	Cost
40 foot wood pole					\$251.28	\$198.90	\$0.00
45 foot wood pole					\$273.78	\$198.90	\$0.00
50 foot wood pole	1				\$390.38	\$198.90	\$0.00
55 foot wood pole	22	14	19		\$425.33	\$198.90	\$34,332.65
60 foot wood pole	3	4	1		\$636.33	\$198.90	\$6,681.84
65 foot wood pole	1	3			\$701.33	\$198.90	\$3,600.92
70 foot wood pole					\$913.20	\$298.35	\$0.00
75 foot wood pole	1				\$1,176.25	\$298.35	\$0.00
80 foot wood pole					\$1,479.40	\$298.35	\$0.00
Relocate Transformer	8	2	16		\$50.00	\$198.90	\$6,471.40
Service Drop	5	4	28		\$150.00	\$99.45	\$9,229.65
Single-Phase Tap	7	2	1		\$150.00	\$99.45	\$2,494.50
Multi-Phase Tap	3	5	2		\$200.00	\$99.45	\$2,994.50
336.4 ACSR	3020	2780	2650		\$1.48	\$1.50	\$25,181.00
Subtotal							\$90,986.46
20% Margin(for miscellaneous material & labor)							\$18,197.29
Total							\$109,183.75

Notes:

Section 1C1 has 21 IECA poles, RMU will install approx. 26 poles to decrease the distance between spans. Section 1C2 has 15 IECA poles, RMU will install approx. 21 poles to decrease the distance between spans. Section 1C3 has 18 IECA poles, RMU will install approx. 20 poles to decrease the distance between spans.

TOTAL FOR ALL EAST, CENTRAL AND WEST IECA UPGR/ \$283,323.12

SOUTHSIDE ANNEXATION AREA FEASIBILITY STUDY APPENDIX B

Costs to RMU associated with upgrading the current RMU facilities.

East Area

NO ANTICIPATED UPGRADES REQUIRED

Central Area

NO ANTICIPATED UPGRADES REQUIRED

West Area

			Line Section		T	Material	Labor	Total
Description of Item	3C1	3C2	3C3	3C4	3C5	Cost	Cost	Cost
55 foot wood pole		. 22		12		\$425.33	\$198.90	\$21,223.82
2000kVA 4.16-12.47kV Xfmr	1					\$20,000.00	\$4,773.60	\$24,773.60
600Amp Switch Disconnect			1			\$1,878.00	\$1,591.20	\$3,469.20
112.5kVA 12.47kV-208Y Xfmr				1		\$2,984.00	\$298.35	\$3,282.35
Relocate Transformer		6				\$50.00	\$198.90	\$1,493.40
25kVA Dual Voltage Transformer					17	\$600.00	\$298.35	\$15,271.95
50kVA Dual Voltage Transformer					5	\$1,000.00	\$298.35	\$6,491.75
Service Drop		4			3	\$150.00	\$198.90	\$2,442.30
Single-Phase Tap		1		2	3	\$150.00	\$198.90	\$2,093.40
Multi-Phase Tap		1		1		\$200.00	\$198.90	\$797.80
336.4 ACSR		3850		1850		\$1.48	\$1.50	\$16,986.00
Subtotal \$								
20% Margin(for miscellaneous material & labor)								
Total	·	<u> </u>						\$19,665.11 \$117,990.68

Notes: