Exhibit No.: Issues: Witness: Sponsoring Party: Type of Exhibit: Case No.: Date Testimony Prepared:

Depreciation Rosella L. Schad MoPSC Staff Surrebuttal Testimony HR-2009-0092 April 2009

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

ROSELLA L. SCHAD, PE, CPA

Great Plains Energy, Incorporated GREATER MISSOURI OPERATIONS COMPANY GMO-L&P STEAM

CASE NO. HR-2009-0092

Jefferson City, Missouri April 2009

1	TABLE OF CONTENTS
2	OF THE SURREBUTTAL TESTIMONY
3	OF
4	ROSELLA L. SCHAD, PE, CPA
5 6 7	Great Plains Energy, Inc. GREATER MISSOURI OPERATIONS COMPANY GMO-L&P STEAM
8	CASE NO. HR-2009-0092
9	EXECUTIVE SUMMARY1
10	FAILURE TO SUBMIT A COMPLETE DEPRECIATION STUDY2
11	NEED FOR DEPRECIATION RATE CHANGES
12	FAILURE TO USE AUTHORIZED DEPRECIATION RATES
13	REJECTION OF LIFE-SPAN METHOD7
14	STAFF'S PROPOSED DEPRECIATION RATES 10
15	STAFF'S RECOMMENDATIONS

1		SURREBUTTAL TESTIMONY
2		OF
3		ROSELLA L. SCHAD, PE, CPA
4 5 6 7		Great Plains Energy, Inc. GREATER MISSOURI OPERATIONS COMPANY GMO-L&P STEAM
8		CASE NO. HR-2009-0092
9	Q.	Please state your name and business address.
10	А.	Rosella L. Schad, 200 Madison Street, Jefferson City, Missouri 65101
11	Q.	By whom are you employed an in what capacity?
12	А.	I am employed by the Missouri Public Service Commission (Commission)
13	as a Utility Ro	egulatory Engineer.
14	Q.	Are you the same Rosella L. Schad who filed testimony in the Staff's Cost of
15	Service Repor	rt filed in this case?
16	А.	Yes, I am.
17	EXECUTIV	E SUMMARY
18	Q.	What is the purpose of this testimony?
19	А.	My surrebuttal testimony on Depreciation addresses the following issues.
20 21		1. The Company is not in compliance with the Code of State Regulations governing depreciation studies.
22 23 24		2. There is a need for a complete depreciation study for GMO assets and to address depreciation rates for all accounts, including corporate accounts in the current rate case.

1	3. The Company is not in compliance with the Commission's Report & Order
2	from its last rate case, Case No. ER-2007-0004
3	4. The Commission's rejection of the life-span method for calculating
4	depreciation rates for the non-nuclear production plant accounts in its
5	recent adoptions of depreciation rates for electric utilities.
6	5. Identification of the Company's growing over-accrual in the Company's
7	accumulated reserve for depreciation for both GMO-MPS and GMO-L&P,
8	determined by Staff's recommended whole life rates.
9	6. Identification by the Company's depreciation consultant of a growing
10	over-accrual in the Company's accumulated reserve for depreciation for the
11	assets of both the GMO-MPS division and the GMO-L&P division, as well
12	as specifically for the Steam and Other Production assets for both
13	divisions.
14	7. Correction of minor computation errors for two accounts.
15	FAILURE TO SUBMIT A COMPLETE DEPRECIATION STUDY
16	
	FAILURE TO SUBMIT A COMPLETE DEPRECIATION STUDY Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states,
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16 17 18 19	Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004."
16 17 18 19 20	Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004." Has the Company submitted a complete study in compliance with that Stipulation and
16 17 18 19 20 21	Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004." Has the Company submitted a complete study in compliance with that Stipulation and Agreement?
16 17 18 19 20 21 22	 Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004." Has the Company submitted a complete study in compliance with that Stipulation and Agreement? A. No. The depreciation study submitted by the Company to Staff failed to cover
16 17 18 19 20 21 22 23	 Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004." Has the Company submitted a complete study in compliance with that Stipulation and Agreement? A. No. The depreciation study submitted by the Company to Staff failed to cover all plant accounts. A partial depreciation study conducted by Foster Associates was provided account.
16 17 18 19 20 21 22 23 24	 Q. On page 5 of Dr. Ronald E. White's (Dr. White) rebuttal testimony he states, "It is my understanding that the studies conducted by Foster Associates were filled with the Commission in accordance with a Stipulation and Agreement in Case No. ER-2007-0004." Has the Company submitted a complete study in compliance with that Stipulation and Agreement? A. No. The depreciation study submitted by the Company to Staff failed to cover all plant accounts. A partial depreciation study conducted by Foster Associates was provided April 10th, 2008 to Aquila Networks, Inc. In Staff's Cost of Service Report (Report),

1 with 4 CSR 240-3.175(1)(B)2." On page 135 of its Report, Staff noted that the Company 2 never filed for a waiver of the requirement to do so. Staff's review of these corporate 3 accounts in its depreciation study identifies why there is a need to address the depreciation 4 rates for several of the corporate plant accounts and Staff identifies those in its Report.

5

NEED FOR DEPRECIATION RATE CHANGES

Q. Company witness, Ronald A. Klote, states on pages 2 and 3 of his rebuttal testimony, "It is anticipated that in association with the completion of the significant capital project of the building of Iatan 2 Coal fired generation facility there will be a system wide depreciation study conducted on all Kansas City Power & Light Company ("KCP&L") and GMO assets. Depreciation rates from this comprehensive system wide study should be used as the basis for computing depreciation expense on a going forward basis." Do you agree?

13 A. No. Waiting for a system wide comprehensive study including KCPL assets 14 should not be the basis for not addressing depreciation rates for the corporate plant accounts 15 and other assets of GMO in the current rate case. A comprehensive study including 16 KCPL assets has no bearing on the current issues regarding depreciation rates for the 17 corporate plant accounts and other assets of GMO in the current rate case. As stated on page 18 136 of Staff's Cost of Service Report, "Account 391.05, Computer Systems Development, 19 account 394.00, Tools, Shop and Garage Equipment, and account 397.00, Communications 20 Equipment are currently fully accrued." Consequently, Staff recommended 21 a 0% depreciation rate for these accounts. While the Iatan 2 plant will be a significant plant 22 addition for GMO, that addition alone does not justify postponing this needed change in 23 depreciation rates in the current case.

1

FAILURE TO USE AUTHORIZED DEPRECIATION RATES

2 Q. What is the effect of further postponement of the implementation of 3 appropriate depreciation rates?

4 A. Staff has a concern regarding the Company's failure to use the depreciation 5 rates authorized for several of its corporate accounts, which caused an understatement of the reserve of approximately \$4.2 million, and an equal overstatement of rate base. 6 7 Allowing this overstatement of rate base to remain on the company's books results in the 8 Company collecting revenues to which they are not entitled. Further delay of conducting a 9 depreciation study or failure to change depreciation rates at this time increases the likelihood 10 that accounts become over-accrued.

11 Q. Has Staff indicated to the Company the need for a depreciation study prior to 12 the filing of this case?

13 On page 6 of the direct testimony of Staff depreciation witness, A. Yes. Rosella L. Schad, PE, CPA, in Aquila, Inc. d/b/a Aquila Networks-MPS (Electric) 14 15 and Aquila Networks-L&P (Electric) Case No. ER-2007-0004, Staff addressed this as 16 follows:

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retained but that the Staff perform a complete depreciation study in the Company's next rate case. During the 2007 rate case proceeding, did any party oppose Staff's

Q. What is Staff's recommendation for depreciation rates in this case?

A. Staff recommends that the currently ordered depreciation rates be

23 recommendation that Staff perform a complete depreciation study in the Company's next rate case?

24

Q.

A. 1 No. In fact, on page 16 of rebuttal testimony of Company witness, 2 Dennis R. Williams, Aquila offered its support for Staff performing a complete depreciation 3 study in the Company's next rate case, as follows: 4 Q. What is Aquila's proposal in this case? 5 A. Aquila agrees with the MPSC staff that currently 6 ordered depreciation service lives and depreciation rates 7 should be retained and that a depreciation study of all 8 functional plant assets be performed and submitted in 9 the next rate case. 10 Q. Is the Company including corporate assets in plant-in-service in this case? 11 12 A. page 65 of his direct testimony, Company Yes. On witness 13 Ronald A. Klote states, "The plant-in-service for the depreciation calculation is calculated 14 using the adjusted ending balance of electric gross plant, both direct and allocated, at 15 December 31, 2007 plus any projected capital additions between January 1, 2008 and 16 March 31, 2009." Earlier in direct testimony on page 7, he explained what is meant by 17 allocated corporate common plant in service, "Allocated corporate common plant is service 18 assets includes assets that support the Company's overall infrastructure. These assets include 19 items such as the general ledger system and billing system." 20 Q. Has the category Corporate Assets been identified prior to this case as a 21 category of assets in need of depreciation rate analysis? 22 A. Company witness, Susan K. Braun, stated on page 20 of her Yes. 23 direct testimony in Case No. ER-2005-0436 as follows" "What depreciation rates are used in your depreciation 24 Q. 25 calculation?" 26 "The rates used for the depreciation annualization A. 27 calculation for MPS and L&P direct plant are from 28 depreciation studies performed by Foster Associates, 29 Inc. using actual plant data at December 31, 2001.

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1 2 3 4 5 6 7 8 9	A separate depreciation study was performed by Foster Associates, Inc. for Aquila's corporate assets using plant data forecasted through December 31, 2002. This separate study and corresponding rates are applied to all allocated plant. Aquila witness Ronald E. White of Foster Associates, Inc. filed testimony in Case No. ER-2004-0034 and HR-2004-0024 on the actual rates and the methodology applied in calculating these rates."
9 10	Q. Do you agree with the Company's position found on pages 3 and 4 of
11	Company witness Ron Klote's rebuttal testimony that they have the liberty to set depreciation
12	rates to zero once an account becomes fully depreciated?
13	A. No. The authorized rates for the Company were set in the Report and Order in
14	the Company's last case, Case No. ER-2007-0004. On page 68 of the Commission's Report
15	and Order it states, "The Commission finds Aquila's currently approved depreciation rates are
16	appropriate to use to determine rates in this case. The Commission further finds no party
17	objects to the use of those depreciation rates."
18	Q. Likewise, does the Company have the liberty to set depreciation rates higher
19	than their authorized rates if an account is under-accrued or the accumulated reserve for
20	depreciation for a particular account has a debit balance?
21	A. No. Just like the Company can not arbitrarily set a particular depreciation rate
22	lower for an account, it can not arbitrarily set a particular depreciation rate higher for an
23	account. For example, the accumulated reserve for depreciation for corporate plant account
24	390, Structures & Improvements, was left with a debit balance in September of 2008 of
25	approximately \$750,000 after assets in the Structures and Improve account were transferred to
26	Black Hills, and the associated accumulated reserve for depreciation for those assets were also
27	transferred. Authorized rates stay in effect until new rates are ordered by the Commission.
28	This is true even if there are not expected to be any additional capital additions.

1	Q.	Did Staff have a recommendation to address the approximately \$4.2 million of							
2	depreciation accrual the Company must impute due to its failure to properly keep its rates set								
3	at authorized levels?								
4	Q.	Yes. As stated on page 139 of Staff's Cost of Service Report, "Staff also							
5	recommends	this additional depreciation accrual be transferred to the reserve							
6	for ECORP a	account 390.00, Structures & Improvements, which is currently negative and,							
7	thus, under-ac	crued.							
8	А.	What does it mean that the reserve is currently negative?							
9	Q.	The Accumulated Reserve for Depreciation is normally a credit. Saying that a							
10	particular rese	erve account is negative indicates that this specific reserve account has a debit							
11	balance. Staf	f stated on page 125 of Staff's Cost of Service Report as follows:							
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26		Staff's review of the Company's records through December 31, 2008 found additional reserve deficiencies, of approximately \$1 million, from additional premature retirements, that cause three of the five ECORP accounts to have negative reserve amounts." In addition to account 390.00, Structures & Improvements, accounts 391.00 Office Furniture, and 397.00, Communications Equipment, all have negative reserves at December 31, 2008. Thus, all three accounts have a debit balance as of December 31, 2008. Staff's recommendation could be expanded to transfer some of the additional imputed depreciation accrual from accounts 391.02, 391.05, 394.00, and 398.00, Computer Hardware, Computer Systems Development, Tools, Shop, and Garage Equipment, and Miscellaneous Equipment, to other ECORP accounts besides account 390.00, Structures & Improvements.							
27	REJECTION	NOF LIFE-SPAN METHOD							
28	Q.	On pages 11-14 of his rebuttal testimony Dr. White addresses life-span method							
29	and states that	t no explanation was offered [by Staff] for abandoning the life-span treatment							

30 employed by both Company and Staff in Missouri Public Service Case No. ER-97-394.

Please provide Staff's rationale for not employing the life-span method for calculating
 depreciation rates for production plant assets in this case, and the impact on annual
 depreciation accruals.

4 A. Staff's view has been that estimated retirement dates for GMO's production 5 plant are so uncertain that the use of them in the depreciation model computes service lives 6 that are unrealistically short, thus minimizing the time ratepayers have to return the 7 Company's investment and interim cost of removal. Consequently, the life-span method 8 significantly increases the amount of money the utility is allowed to recover as annual 9 depreciation expense and has a significant impact in the increase in rates that the utility will 10 be allowed to charge its customers. The Staff has not been able to determine that Dr. White's 11 estimated retirement dates are based on anything more than speculation. Without better 12 evidence of when those plants are to be retired, allowing the company to increase its 13 depreciation expenses based on what is little more than speculation about possible retirement 14 dates would be inappropriate. Since the time frame of Missouri Public Service Case No. ER-97-394, there have been several Commission's Report and Orders¹ that have rejected the 15 16 reduced service lives resulting from use of the life-span method. Staff's estimates in the 17 attached Schedule 4 shows the impact on annual depreciation accruals of using the life-span 18 method on production plant assets by Dr. White to be approximately \$4.4 million 19 for GMO-MPS, approximately \$0.8 million for GMO-L&P electric and approximately 20 \$200K for GMO-L&P industrial steam.

¹ See Commission Report and Order, The Empire District Electric Company Case No. ER-2001-299; Commission Report and Order, The Empire District Electric Company Case No. ER-2004-0570; Commission Report and Order, Union Electric d/b/a AmerenUE Case No. ER-2007-0002

Q. Is the major difference between Staff's proposed depreciation rates
 and Dr. White's whole-life depreciation rates in his 2008 depreciation study for production
 plant accounts due to Dr. White's use of the life-span method?

A. Yes.

4

Q. Has the Company recently undertaken any major capital improvements or
upgrades, or incurred major maintenance expense at their generating facilities?

A. Yes. On pages 8 and 9 of the direct testimony of Company witness,
Ronald A. Klote, he describes the environmental upgrades and other capital additions for both
MPS and L&P. On pages 27 and 28 in Mr. Klote's direct testimony in the Company's
Case No. ER-2007-0004, he describes major maintenance expenses at the generating plants
of MPS and L&P.

Q. Does Staff consider these expenditures by the Company to maintain or upgradeexisting generating units to affect the likelihood of their retirement?

A. Yes. The Company would compare in a cost benefit analysis the cost of
replacing this capacity with the cost to maintain or upgrade them. The Company's decision to
maintain and upgrade them indicates an unlikelihood of retiring them.

Q. Given the continued reliance on the Company's existing generating units does
Staff have any indication that the eventual service life of these units has become more certain?
A. No. In addition, it is becoming increasingly more expensive to site an electric

20 generating station. This causes the economics of maintaining and upgrading existing units to
21 be more viable today and well into the future. Accordingly, Staff finds the estimated
22 retirement dates used by Dr. White to be nothing more than speculative.

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STAFF'S PROPOSED DEPRECIATION RATES

Q. Dr. White describes on page 17 of his rebuttal testimony how the life analysis
techniques used by Foster Associates in conducting depreciation studies differ from those
used by Staff and indicates that there is a serious limitation in the techniques used by Staff.
Is there a serious limitation in the technique Staff used?

6 A. No. In fact, Staff finds the results from its analyses to be more representative 7 of the Company's experience for both MPS and L&P than that presented by Dr. White. 8 In Table 7 on page 13 of the rebuttal testimony of Dr. White, he illustrates that the whole life 9 composite average service life (ASL) determined by Foster Associates for the Sibley Steam 10 Production Units and Lake Road Steam Production Units to be 35 years and 34 years, 11 respectively, and the composite whole life ASL determined by Staff to be 50 years for each of 12 these facilities. I will address first MPS's Sibley Generating Plant and then L&P's 13 Lake Road Generating Plant.

14 In its Report and Order in Utilicorp United Inc. (now GMO) Case No. ER-88-167, 15 on page 32, the Commission stated, "Sibley Units 1 and 2 began service in 16 1961 and 1962, respectively and Sibley Unit 3 began service in 1969. Company was 17 expecting to retire Sibley Units 1 and 2 in 1990. The rebuilding project is expected to extend 18 the life of the three units at the Sibley plant for about 20 years." More recently in Aquila 19 Networks, Inc. (formerly Utilicorp United Inc. and now KCPL-GMO) Case No. 20 ER -2007-0004 on page 65 of its Report and Order, the Commission stated, "Commission 21 notes the expenditures involving the Sibley Rebuild and Western Coal Conversion product. 22 These projects were undertaken to extend the useful life of the Sibley Generating Station by 23 20 years and to comply with the 1990 Federal Clean Air Act." Environment upgrades

1 continue at the Sibley Generating Station, so it would appear unlikely that the Sibley units are 2 going to be retired in the near future." Accordingly, the whole life composite 3 35-year ASL determined by the techniques that Foster Associates employ is far less realistic 4 than the 50-year ASL Staff is proposing. In addition, in the Company's earlier case, Case No. 5 ER-2005-0436, Staff's depreciation study noted an approximately \$59 million over-accrual in 6 the depreciation reserve for the Sibley Generating Plant and recommended a whole life 7 composite ASL of 48 years. The Company's has retained in current depreciation rates a 8 composite 48-year ASL for the Sibley Generating Plant accounts. Staff has determined an 9 approximately \$62 million over-accrual in the depreciation reserve for the Sibley Generating 10 Plant in Staff's current depreciation study. This further demonstrates that Staff's 11 recommended composite ASL for the Sibley Generating Plant of 50 years should be 12 authorized. This change in ASL from the current 48 years to Staff's recommended 50 years 13 in this case produces a slightly lower composite depreciation rate, resulting in a slight 14 decrease to the annual depreciation accrual and helping to address the growing over-accrual 15 for the Sibley production plant reserve accounts.

16 Similarly, Dr. White notes on page 11 of his rebuttal testimony that the first unit of the 17 Lake Road plant was installed in 1952. This first unit is already 57 years old. 18 Accordingly, the whole life composite 34 year ASL determined by the techniques that 19 Foster Associates employ is far less realistic than the 50-year ASL Staff is proposing. 20 In addition, in the Company's earlier case, ER-2005-0436, Staff's depreciation study noted an 21 approximately \$17 million over-accrual in the depreciation reserve for the Lake Road 22 Generating Plant and recommended a whole life composite ASL of 48 years. The Company 23 has retained in current depreciation rates a 48-year composite ASL for the Lake Road

Generating Plant accounts. Staff has determined an approximately \$21 million over-accrual in the depreciation reserve for the Lake Road Generating Plant in Staff's current depreciation study. This further demonstrates that Staff's recommended composite ASL for the Lake Road Generating Plant of 50 years should be authorized. This change in ASL from the current 48 years to Staff's recommended 50 years in this case produces a slightly lower composite depreciation rate, resulting in a slight decrease to the annual depreciation accrual and helping to address the growing over-accrual for the Lake Road production plant reserve accounts.

Q. Did Dr. White recognize any over-accrual for Total Electric Plant reserve accounts for MPS and L&P (electric and industrial steam) in the 2008 depreciation study?

A. Yes. On pages 4 and 5 of the Company's 2008 depreciation study,
Dr. White noted reserve imbalances for Total Electric Plant reserve accounts of approximately
\$129 million and approximately \$75 million for MPS and L&P (electric and industrial steam),
respectively. Dr. White is recognizing a total of a \$204 million depreciation reserve
over-accrual for both MPS and L&P (electric and industrial steam) combined
(excluding corporate).

Q. How does Dr. White's recognition of reserve imbalances of approximately
\$129 million and approximately \$75 million for MPS and L&P (electric and industrial steam)
compare to that identified in its depreciation study in the previous depreciation studies five
years ago?

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A. According to the Company's 2002 Depreciation Rate Studies for Networks-MPS (Electric Common) Aquila and revised June 9, 2003 and Aquila Networks-SJLP (Electric, Steam, and Common) prepared that were

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- by Foster Associates (the depreciation studies five year ago), page 4 in each document,
 reserve imbalances of approximately \$36 million and \$25 million were identified.
- Q. How does Dr. White's recognition of reserve imbalances for Steam Production
 and Other Production accounts from the 2008 Depreciation Rate Study, Statement C, compare
 with those in his corresponding Statement C from roughly five years ago for MPS and L&P,
 respectively?

7 A. In the Company's Depreciation Rate Study, Statement C, roughly five years 8 ago, the reserve imbalances for the Steam Production and Other Production accounts were 9 approximately \$16 million and \$5 million for MPS and L&P, respectively. In the Company's 10 current Depreciation Study, Statement C, the reserve imbalances for the Steam Production 11 and Other Production accounts are now approximately \$87 million and \$45 million 12 for MPS and L&P, respectively. Based on the Company's depreciation consultant's own 13 workpapers, the depreciation over-accrual for Steam Production and Other Production has 14 increased for MPS and L&P by 400% and 800%, respectively, from December 31, 2001 to 15 December 31, 2007.

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STAFF'S RECOMMENDATIONS

Q. You mentioned earlier that Company witness, Ronald A. Klote, supports no
change in depreciation rates until completion of the significant capital project of the building
of Iatan 2 Coal fired generation facility and that the Company perform a system wide
depreciation study conducted on all Kansas City Power & Light Company ("KCP&L") and
GMO assets. Has the Company requested to consolidate assets?

22

A. No.

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Q. You have described the impact of not changing depreciation rates at this time.
 If the Commission agrees to not change depreciation rates at this time, what is Staff's
 recommendation regarding the treatment of not decreasing annual depreciation accruals that
 would result from ordering Staff's recommended depreciation rates?

A. Staff would recommend that they be treated as a merger detriment.
Staff witness, Charles R. Hyneman, will discuss further this issue and Staff's recommendation.

8 Q. Can you address the minor computational errors Dr. White references on page
9 7 of his rebuttal testimony?

10 A. Yes. He indicated that there were incorrect net salvage rates in Staff's 11 workpapers for MPS account 358.00, L&P account 396.00, and L&P account 381.09. 12 I reviewed those three accounts and determined that MPS account 358.00 should have a net 13 salvage percentage of -20% and that L&P account 381.09 should have a net salvage 14 percentage of -1%, instead of 20% and -4%, respectively. I did not find Staff workpapers to 15 have an error for L&P account 396.00. Both Staff and the Dr. White have a net salvage percentage of 7% for L&P account 396.00. The Company confirmed in an e-mail on 16 17 March 24th, 2008 to Staff that they agreed there was no error for this account. 18 Staff's recommended depreciation rates for MPS account 358.00 and L&P account 381.09 19 should be 2% and 3.37%, respectively, instead of 1.33% and 3.47%. Based on 20 September 30th, 2008 plant-in-service balances, this is a change in annual depreciation accrual 21 of a \$390 increase and a \$412 decrease for MPS account 358.00 and L&P account 381.09, 22 respectively. These corrections to my direct testimony, Schedules 3, 4, and 5, are provided 23 in Schedules 1, 2, and 3 attached.

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- Q. Please provide a summary of your surrebuttal testimony. A. My surrebuttal testimony identifies the following issues and recommendations: 1. There is a need for a complete depreciation study for GMO assets and to address and change depreciation rates for all accounts, including corporate accounts in the current rate case 2. There is a need for a change in the currently ordered depreciation rates as the Company has a growing over-accrual in the Company's accumulated reserve for depreciation for the assets of both the GMO-MPS division and the GMO-L&P division, as well as specifically for the Steam and 10 Other Production assets for both divisions. 3. The Commission should reject the life-span method for calculating depreciation rates for the Company's production plant accounts because this treatment significantly increases the amount of money the utility is allowed to recover as annual depreciation expense and has a significant impact in the increase in
 - 4. The Company is not in compliance with the Code of State Regulations governing depreciation studies and is not in compliance with the Commission's Report and Order from its last rate case, Case No. ER-2007-0004.

rates that the utility will be allowed to charge its customers .

- 5. I recommend that the Commission order the depreciation rates for the Company's GMO-L&P industrial steam division, shown in the attached Schedule 1-3. This schedule reflects the minor corrections noted above to Schedules 3-3 from the Depreciation section of Staff's Cost of Service Report. The attached Schedules 1, 2, and 3 replace Schedules 3, 4, and 5 for GMO- MPS, GMO-L&P electric, and GMO-L&P industrial steam, respectively, from the Depreciation section of Staff's report.
 - Q. Does this conclude your surrebuttal testimony?

28

A.

Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L) Greater Missouri Operations Company for) Approval to Make Certain Changes in its) Charges for Steam Heating Service)

Case No. HR-2009-0092

AFFIDAVIT OF ROSELLA L. SCHAD, PE, CPA

STATE OF MISSOURI) SS. COUNTY OF COLE)

Rosella L. Schad, of lawful age, on his oath states: that she has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, consisting of 15 pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by her; that she has the knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.

Rosella L. Schad

Subscribed and sworn to before me this

day of April, 2009.

NIKKI SENN Notary Public - Notary Seal State of Missouri Commissioned for Osage County My Commission Expires: October 01, 2011 Commission Expires: October 01, 2011 Commission Number: 07287016

Notary Public

HR-2009-0092 KCPL-GMO-L&P-INDUSTRIAL STEAM SCHEDULE 1-3 Depreciation Rate Recommendation

Account Number	Description	Depreciation Rate	ASL (Years)	Net Salvage (%)
	INDUSTRIAL STEAM PRODUCTION PLANT (LAKE ROAD)			
311.00	Structures and Improvements	1.72%	60	-3%
312.00	Boiler Plant Eq.	2.04%	50	-2%
314.00	Turbogenerator Units	2.31%	45	-4%
315.00	Accessory Electric Eq.	2.24%	45	-1%
316.00	Miscellaneous Power Plant Eq.	2.10%	50	-5%
	INDUSTRIAL STEAM PRODUCTION PLANT			
311.09	Structures and Improvements	2.13%	60	-28%
312.09	Boiler Plant Eq.	2.18%	50	-9%
315.09	Accessory Electric Eq.	2.24%	45	-1%
	INDUSTRIAL STEAM DISTRIBUTION PLANT			
375.09	Structures and Improvements	1.72%	60	-3%
376.09	Mains	2.29%	45	-3%
379.09	Measuring and Regulating Station EqCity Gate	2.27%	45	-2%
380.09	Services	2.22%	45	0%
381.09	Meters	3.37%	30	-1%
	INDUSTRIAL STEAM GENERAL PLANT (LAKE ROAD)			
390.00	Structures and Improvements	1.75%	60	-5%
391.00	Office Furniture and Eq.	3.30%	30	1%
391.02	Computer Hardware	9.70%	10	3%
391.04	Computer Software	10.00%	10	0%
391.05	Computer Systems Development	10.00%	10	0%
392.00	Transportation Eq.	8.30%	10	17%
393.00	Stores Eq.	3.33%	30	0%
394.00	Tools, Shop and Garage Eq.	3.60%	30	-8%
395.00	Laboratory Eq.	3.33%	30	0%
396.00	Power Operated Eq.	4.65%	20	7%
~~~ ~~	Communications Eq.	3.37%	30	-1%
397.00				

# HR-2009-0092 KCPL-GMO-L&P-INDUSTRIAL STEAM SCHEDULE 1-3 Depreciation Rate Recommendation

Account Number	Description	Depreciation Rate	ASL (Years)	Net Salvage (%)
	ECORP PLANT			
390.00	Structures and Improvements	1.67%	60	0%
391.00	Office Furniture and Eq.	3.33%	30	0%
391.02	Computer Hardware	10.00%	10	0%
391.04	Computer Software	10.00%	10	0%
391.05	Computer Systems Development	0.00%	10	0%
392.00	Transportation Eq.	0.00%	10	0%
393.00	Stores Eq.	0.00%	30	0%
394.00	Tools, Shop and Garage Eq.	0.00%	30	0%
395.00	Laboratory Eq.	0.00%	30	0%
396.00	Power Operated Eq.	0.00%	20	0%
397.00	Communications Eq.	3.33%	30	0%
398.00	Miscellaneous Eq.	0.00%	25	0%

				Staff Proposed			Existing Ordered					
		Adjusted Jurisdictional										
Account Number	Description	Plant Balance 9/30/2008	ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual
(1)	(2)	(3)	(4)	(5)	(6)	(7)= {[100%-(6)]/(4)}	(8)=[(3)*(7)]	(9)	(10)	(11)	(12)	(13)=[(3)*(12)]
	INDUSTRIAL STEAM PRODUCTION PLANT (LAKE ROAD)											
311.00	Structures and Improvements	\$2,196,997	60	R4	-3%	1.72%	\$37,788	54	R4	-2.7%	1.90%	\$41,743
312.00	Boiler Plant Eq.	\$14,541,543	50	S0.5	-2%	2.04%	\$296,647	48	R1.5	-3.7%	2.16%	\$314,097
314.00	Turbogenerator Units	\$5,515	45	R3	-4%	2.31%	\$127	44	R2.5	-2.6%	2.33%	\$128
315.00	Accessory Electric Eq.	\$634,900	45	S0.5	-1%	2.24%	\$14,222	43	S0.5	-1.8%	2.37%	\$15,047
316.00	Miscellaneous Power Plant Eq.	\$ <u>32,835</u>	50	R4	-5%	2.10%	<u>\$690</u>	40	R3	-15.8%	2.90%	<u>\$952</u>
	Total for Industrial Steam Production Plant (Lake Road):	<u>\$17,411,790</u>					<u>\$349,475</u>					<u>\$371,96</u> 8
	INDUSTRIAL STEAM PRODUCTION PLANT											
311.09	Structures and Improvements	\$32,160	60	R4	-28%	2.13%	\$685	54	R4	-27.6%	2.36%	\$759
312.09	Boiler Plant Eq.	\$778,578	50	S0.5	-9%	2.18%	\$16,973	48	R1.5	-24.9%	2.60%	\$20,243
315.09	Accessory Electric Eq.	\$ <u>80,600</u>	45	S0.5	-1%	2.24%	\$ <u>1,805</u>	43	S0.5	-11.2%	2.59%	\$ <u>2,088</u>
	Total for Industrial Steam Production Plant:	\$ <u>891,338</u>					\$ <u>19,463</u>					\$ <u>23,090</u>
	INDUSTRIAL STEAM DISTRIBUTION PLANT											
375.09	Structures and Improvements	\$151,660	60	R4	-3%	1.72%	\$2,609	32	L4	-5.6%	3.30%	\$5,005
376.09	Mains	\$1,660,914	45	S0	-3%	2.29%	\$38,035	42	R1.5	-3.1%	2.45%	\$40,692
379.09	Measuring and Regulating Station EqCity Gate	\$553,075	45	S0	-2%	2.27%	\$12,555	44	R3	-4.7%	2.38%	\$13,163
380.09	Services	\$100,842	45	R4	0%	2.22%	\$2,239	40	S2.5	-4.9%	2.62%	\$2,642
381.09	Meters	\$ <u>412,137</u>	30	L3	-1%	3.37%	\$ <u>13,889</u>	21	R2	-0.1%	4.77%	\$ <u>19,659</u>
	Total for Industrial Steam Distribution Plant:	\$ <u>2,878,628</u>					\$ <u>69,326</u>					\$ <u>81,161</u>

			Staff Proposed					Existing	Ordered			
		Adjusted Jurisdictional										
Account Number	Description	Plant Balance 9/30/2008	ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual
(1)	(2)	(3)	(4)	(5)	(6)	(7)= {[100%-(6)]/(4)}	(8)=[(3)*(7)]	(9)	(10)	(11)	(12)	(13)=[(3)*(12)]
	INDUSTRIAL STEAM GENERAL PLANT (LAKE ROAD)											
390.00	Structures and Improvements	\$0	60	R1.5	-5%	1.75%	\$0	45	R1.5	-23.0%	2.73%	\$0
391.00	Office Furniture and Eq.	\$69,010	30	L2	1%	3.30%	\$2,277	24	L4	0.0%	4.17%	\$2,878
391.02	Computer Hardware	\$77,006	10	L0	3%	9.70%	\$7,470	8	R0.5	0.0%	12.50%	\$9,626
391.04	Computer Software	\$34,014	10	S1.5	0%	10.00%	\$3,401	9	S1.5	0.0%	11.11%	\$3,779
391.05	Computer Systems Development	\$0	10	S1.5	0%	10.00%	\$0					\$0
392.00	Transportation Eq.	\$42,582	10	R5	17%	8.30%	\$3,534	8	S6	10.0%	11.25%	\$4,790
393.00	Stores Eq.	\$128	30	L2	0%	3.33%	\$4	27	L1.5	0.0%	3.70%	\$5
394.00	Tools, Shop and Garage Eq.	\$73,126	30	L0	-8%	3.60%	\$2,633	28	L0	-3.0%	3.68%	\$2,691
395.00	Laboratory Eq.	\$55,652	30	R2.5	0%	3.33%	\$1,853	28	R2.5	4.0%	3.43%	\$1,909
396.00	Power Operated Eq.	\$161,614	20	R2.5	7%	4.65%	\$7,515	22	R4	2.0%	4.45%	\$7,192
397.00	Communications Eq.	\$28	30	S0	-1%	3.37%	\$1	27	S2	0.0%	3.70%	\$1
398.00	Miscellaneous Eq.	\$ <u>1,973</u>	25	L2	-6%	4.24%	\$ <u>84</u>	24	L3	11.0%	3.71%	\$ <u>73</u>
	Total for Industrial Steam General Plant (Lake Road):	\$ <u>515,133</u>					\$ <u>28,772</u>					\$ <u>32,944</u>
	Total For Industrial Steam Plant:	\$ <u>4,285,099</u>					\$ <u>117,562</u>					\$ <u>137,194</u>
	ECORP PLANT											
390.00	Structures and Improvements	\$401,137	60	R1.5	0%	1.67%	\$6,699	45	R1.5	0.0%	2.22%	\$8,905
391.00	Office Furniture and Eq.	\$443,231	30	L2	0%	3.33%	\$14,760	24	L4	0.0%	4.17%	\$18,483
391.02	Computer Hardware	\$615,559	10	L0	0%	10.00%	\$61,556	8	R0.5	0.0%	12.50%	\$76,945
391.04	Computer Software	\$859,302	10	S1.5	0%	10.00%	\$85,930	9	S1.5	0.0%	11.11%	\$95,468
391.05	Computer Systems Development	\$0	10	S1.5	0%	0.00%	\$0	9	S1.5	0.0%	11.11%	\$0
392.00	Transportation Eq.	\$0	10	R5	0%	0.00%	\$0	8	S6	0.0%	12.50%	\$0
393.00	Stores Eq.	\$0	30	L2	0%	0.00%	\$0					\$0
394.00	Tools, Shop and Garage Eq.	\$2,136	30	L0	0%	0.00%	\$0	28	L0	0.0%	3.57%	\$76
395.00	Laboratory Eq.	\$0	30	R2.5	0%	0.00%	\$0	28	R2.5	0.0%	3.57%	\$0
396.00	Power Operated Eq.	\$0	20	R2.5	0%	0.00%	\$0					\$0
397.00	Communications Eq.	\$90,436	30	S0	0%	3.33%	\$3,012	27	S2	0.0%	3.70%	\$3,346
398.00	Miscellaneous Eq.	\$ <u>21,174</u>	25	L2	0%	0.00%	\$ <u>0</u>	24	L3	0.0%	4.17%	\$ <u>883</u>
	Total For ECORP Plant:	\$ <u>2,432,975</u>					\$ <u>171,956</u>					\$ <u>204,107</u>
	Total For Industrial Steam & ECORP Plant:	\$ <u>24,129,864</u>					\$ <u>638,992</u>					\$ <u>713,269</u>

		-	Company's Current Depreciation Study (Dr. Ron White)				
		Adjusted Jurisdictional				Remaining Life	
Account Number	Description	Plant Balance 9/30/2008	VG ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual
(1)	(2)	(3)	(14)	(15)	(16)	(17)	(18)=[(3)*(17)]
	INDUSTRIAL STEAM PRODUCTION PLANT (LAKE ROAD)						
311.00	Structures and Improvements	\$2,196,997	33.68	200-SC	-3.5%	2.86%	\$62,834
312.00	Boiler Plant Eq.	\$14,541,543	33.50	200-SC	-4.3%	2.12%	\$308,281
314.00	Turbogenerator Units	\$5,515	35.83	200-SC	-5.2%	2.03%	\$112
315.00	Accessory Electric Eq.	\$634,900	35.61	200-SC	-2.5%	1.33%	\$8,444
316.00	Miscellaneous Power Plant Eq.	\$ <u>32,835</u>	37.95	200-SC	-16.7%	0.31%	<u>\$102</u>
	Total for Industrial Steam Production Plant (Lake Road):	<u>\$17,411,790</u>					<u>\$379,773</u>
	INDUSTRIAL STEAM PRODUCTION PLANT						
311.09	Structures and Improvements	\$32,160	82.23	200-SC	-27.6%	5.90%	\$1,897
312.09	Boiler Plant Eq.	\$778,578	27.11	200-SC	-9.4%	4.08%	\$31,766
315.09	Accessory Electric Eq.	\$ <u>80,600</u>	40.54	200-SC	-0.9%	5.20%	\$ <u>4,191</u>
	Total for Industrial Steam Production Plant:	\$ <u>891,338</u>					\$ <u>37,855</u>
	INDUSTRIAL STEAM DISTRIBUTION PLANT						
375.09	Structures and Improvements	\$151,660	32.29	200-SC	-3.2%	3.40%	\$5,156
376.09	Mains	\$1,660,914	39.60	200-SC	-3.4%	2.16%	\$35,876
379.09	Measuring and Regulating Station EqCity Gate	\$553,075	36.69	200-SC	-2.2%	2.81%	\$15,541
380.09	Services	\$100,842	42.97	200-SC	-0.3%	0.55%	\$555
381.09	Meters	\$ <u>412,137</u>	32.71	200-SC	-0.7%	2.62%	\$ <u>10,798</u>
	Total for Industrial Steam Distribution Plant:	\$ <u>2,878,628</u>					\$ <u>26,894</u>

			Company's Current Depreciation Study (Dr. Ron White)							
		Adjusted Jurisdictional				Remaining Life				
Account Number	Description	Plant Balance 9/30/2008	VG ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual			
(1)	(2)	(3)	(14)	(15)	(16)	(17)	(18)=[(3)*(17)]			
	INDUSTRIAL STEAM GENERAL PLANT (LAKE ROAD)									
390.00	Structures and Improvements	\$0	46.71	R1.5	-5.1%	2.87%	\$0			
391.00	Office Furniture and Eq.	\$69,010	19.81	L0	1.3%	6.04%	\$4,168			
391.02	Computer Hardware	\$77,006	11.46	L0	3.0%	6.43%	\$4,951			
391.04	Computer Software	\$34,014	9.77	S1.5	-0.1%	4.22%	\$1,435			
391.05	Computer Systems Development	\$0			0.0%	0.00%	\$0			
392.00	Transportation Eq.	\$42,582	14.57	L0.5	1.7%	-2.37%	(\$1,009)			
393.00	Stores Eq.	\$128	28.18	S1.5	0.2%	-1.43%	(\$2)			
394.00	Tools, Shop and Garage Eq.	\$73,126	30.13	S1	-8.2%	2.23%	\$1,631			
395.00	Laboratory Eq.	\$55,652	29.31	S1.5	0.2%	2.27%	\$1,263			
396.00	Power Operated Eq.	\$161,614	27.67	L0	7.1%	2.30%	\$3,717			
397.00	Communications Eq.	\$28	26.62	02	-0.7%	3.31%	\$1			
398.00	Miscellaneous Eq.	\$ <u>1,973</u>	29.56	R1.5	-6.3%	2.83%	\$ <u>56</u>			
	Total for Industrial Steam General Plant (Lake Road):	\$515,133					\$ <u>16,212</u>			
	Total For Industrial Steam Plant:	\$ <u>4,285,099</u>					\$ <u>80,961</u>			
	ECORP PLANT									
390.00	Structures and Improvements	\$401,137								
391.00	Office Furniture and Eq.	\$443,231								
391.02	Computer Hardware	\$615,559								
391.04	Computer Software	\$859,302								
391.05	Computer Systems Development	\$0								
392.00	Transportation Eq.	\$0								
393.00	Stores Eq.	\$0								
394.00	Tools, Shop and Garage Eq.	\$2,136								
395.00	Laboratory Eq.	\$0								
396.00	Power Operated Eq.	\$0								
397.00	Communications Eq.	\$90,436								
398.00	Miscellaneous Eq.	\$ <u>21,174</u>								
	Total For ECORP Plant:	\$ <u>2,432,975</u>								
	Total For Industrial Steam & ECORP Plant:	\$ <u>24,129,864</u>								

## Case No. HR-2009-0092 KCPL-GMO-L&P-INDUSTRIAL STEAM SCHEDULE 3-3 Accumulated-Theoretical Reserve Comparison

Account		Accumulated Reserve for DepreciatiorRe	Theoretical	Accrual
Number		12/31/2007	12/31/2007	<u>Difference</u> over (under)
(1)	(2)	(3)	(4)	(5)
	INDUSTRIAL STEAM PRODUCTION PLANT			
311.09	Structures and Improvements	(\$8,671)	\$36,948	(\$45,619)
312.09	Boiler Plant Eq.	\$79,770	\$120,368	(\$40,598)
314.09	Turbogenerator Units	\$0	\$0	\$0
315.09	Accessory Electric Eq.	(\$10,432)	\$32,264	(\$42,696)
316.09	Miscellaneous Power Plant Eq.	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
	Total Industrial Steam Production Plant:	\$ <u>60,667</u>	\$ <u>189,580</u>	( <u>\$128,913</u> )
	DISTRIBUTION PLANT			
375.09	Structures and Improvements	\$39,551	\$33,719	\$5,832
376.09	Mains	\$882,530	\$599,827	\$282,703
379.09	Measuring and Regulating Station EqCity Gate	\$215,845	\$157,719	\$58,126
380.09	Services	\$89,049	\$49,211	\$39,838
381.09	Meters	\$ <u>177,803</u>	\$ <u>174,269</u>	\$ <u>3,534</u>
	Total Industrial Steam Distribution Plant:	\$ <u>1,404,778</u>	\$ <u>1,014,745</u>	\$ <u>390,033</u>
	TOTAL INDUSTRIAL STEAM PLANT	<b>\$1,465,445</b>	\$1,204,325	\$ <u>261,120</u>
ΤΟΤΑ	L INDUSTRIAL STEAM PLANT OVER-ACCRUAL: [\$1,465,445 - \$1,204,325	]		\$ <u>261,120</u>

			Staff Proposed						Existing Ordered				
		Adjusted Jurisdictional											
Account	<b>D</b> and the	Plant Balance	ASL	Iowa	Average Net			ASL	lowa	Average Net	Depreciation		
Number	Description	9/30/2008	(Years)	Curve	Salvage	Depreciation Rate (7)=	·	(Years)	Curve	Salvage	Rate	Annual Accrual	
(1)	(2)	(3)	(4)	(5)	(6)	{[100%-(6)]/(4)}	(8)=[(3)*(7)]	(9)	(10)	(11)	(12)	(13)=[(3)*(12)]	
	INDUSTRIAL STEAM PRODUCTION PLANT (LA	KE ROAD											
311.00	Structures and Improvements	\$2,196,997	60	R4	-3%	1.72%	\$37,788	54	R4	-2.7%	1.90%	\$41,743	
312.00	Boiler Plant Eq.	\$14,541,543	50	S0.5	-2%	2.04%	\$296,647	48	R1.5	-3.7%	2.16%	\$314,097	
314.00	Turbogenerator Units	\$5,515	45	R3	-4%	2.31%	\$127	44	R2.5	-2.6%	2.33%	\$128	
315.00	Accessory Electric Eq.	\$634,900	45	S0.5	-1%	2.24%	\$14,222	43	S0.5	-1.8%	2.37%	\$15,047	
316.00	Miscellaneous Power Plant Eq.	\$ <u>32,835</u>	50	R4	-5%	2.10%	<u>\$69</u> 0	40	R3	-15.8%	2.90%	<u>\$95</u> 2	
Total f	or Industrial Steam Production Plant (Lake Road):	<u>\$17,411,79</u> 0					<u>\$349,475</u>					<u>\$371,968</u>	
	INDUSTRIAL STEAM PRODUCTION PLANT												
311.09	Structures and Improvements	\$32,160	60	R4	-28%	2.13%	\$685	54	R4	-27.6%	2.36%	\$759	
312.09	Boiler Plant Eq.	\$778,578	50	S0.5	-9%	2.18%	\$16,973	48	R1.5	-24.9%	2.60%	\$20,243	
315.09	Accessory Electric Eq.	\$ <u>80,600</u>	45	S0.5	-1%	2.24%	\$ <u>1,805</u>	43	S0.5	-11.2%	2.59%	\$ <u>2,088</u>	
	Total for Industrial Steam Production Plant:	\$ <u>891,338</u>					\$ <u>19,463</u>					\$ <u>23,090</u>	
	INDUSTRIAL STEAM DISTRIBUTION PLANT												
375.09	Structures and Improvements	\$151,660	60	R4	-3%	1.72%	\$2,609	32	L4	-5.6%	3.30%	\$5,005	
376.09	Mains	\$1,660,914	45	S0	-3%	2.29%	\$38,035	42	R1.5	-3.1%	2.45%	\$40,692	
379.09	Measuring and Regulating Station EqCity Gate	\$553,075	45	S0	-2%	2.27%	\$12,555	44	R3	-4.7%	2.38%	\$13,163	
380.09	Services	\$100,842	45	R4	0%	2.22%	\$2,239	40	S2.5	-4.9%	2.62%	\$2,642	
381.09	Meters	\$ <u>412,137</u>	30	L3	-1%	3.37%	\$ <u>13,889</u>	21	R2	-0.1%	4.77%	\$ <u>19,659</u>	
	Total for Industrial Steam Distribution Plant:	\$ <u>2,878,628</u>					\$ <u>69,326</u>					\$ <u>81,161</u>	

Existing Ordered Staff Proposed Adjusted Jurisdictional Account Plant Balance ASL Average Net ASL Average Net Depreciation Iowa lowa 9/30/2008 Number Description (Years) Curve Salvage Depreciation Rate Annual Accrual (Years) Curve Salvage Rate Annual Accrual (7)= (1) (2) (3) (4) (5) (6) (8)=[(3)*(7)] (9) (10) (11) (12) (13)=[(3)*(12)] {[100%-(6)]/(4)} INDUSTRIAL STEAM GENERAL PLANT (LAKE ROAD \$0 \$0 390.00 Structures and Improvements 60 R1.5 -5% 1.75% \$0 45 R1.5 -23.0% 2.73% L2 4.17% \$2,878 Office Furniture and Eq. \$69,010 30 1% 3.30% \$2,277 24 L4 0.0% 391.00 **Computer Hardware** 391.02 \$77,006 10 L0 3% 9.70% \$7.470 8 R0.5 0.0% 12.50% \$9,626 9 Computer Software S1.5 0% 10.00% \$3,401 S1.5 0.0% \$3,779 391.04 \$34,014 10 11.11% 391.05 **Computer Systems Development** \$0 10 S1.5 0% 10.00% \$0 \$0 Transportation Eq. \$42.582 10 17% 8.30% \$3.534 8 S6 10.0% 11.25% \$4.790 392.00 R5 393.00 Stores Ea. \$128 30 L2 0% 3.33% \$4 27 L1.5 0.0% 3.70% \$5 394.00 Tools, Shop and Garage Eq. \$73.126 30 10 -8% 3.60% \$2.633 28 10 -3.0% 3.68% \$2.691 395.00 30 R2.5 0% 3.33% \$1.853 28 R2.5 4.0% 3.43% \$1.909 Laboratory Eq. \$55.652 396.00 Power Operated Eq. \$161.614 20 R2.5 7% 4.65% \$7.515 22 R4 2.0% 4.45% \$7.192 S2 Communications Eq. \$28 30 S0 3.37% \$1 27 0.0% 3.70% \$1 397.00 -1% 398.00 Miscellaneous Eq. \$1.973 25 12 -6% 4.24% \$84 24 L3 11.0% 3.71% \$73 Total for Industrial Steam General Plant (Lake Road): \$515,133 \$28,772 \$32,944 **Total For Industrial Steam Plant:** \$4,285,099 \$117,562 \$137,194 ECORP PLANT 390.00 Structures and Improvements \$401,137 60 R1.5 0% 1.67% \$6.699 45 R1.5 0.0% 2.22% \$8.905 24 391.00 Office Furniture and Eq. \$443,231 30 L2 0% 3.33% \$14,760 L4 0.0% 4.17% \$18,483 391.02 Computer Hardware \$615,559 10 L0 0% 10.00% \$61,556 8 R0.5 0.0% 12.50% \$76,945 10.00% 9 391.04 Computer Software \$859,302 10 S1.5 0% \$85,930 S1.5 0.0% 11.11% \$95,468 391.05 Computer Systems Development \$0 10 S1.5 0% 0.00% \$0 9 S1.5 0.0% 11.11% \$0 \$0 0% 0.00% \$0 8 12.50% \$0 392.00 Transportation Eq. 10 R5 S6 0.0% 393.00 Stores Eq. \$0 30 L2 0% 0.00% \$0 \$0 394.00 Tools, Shop and Garage Eq. \$2.136 30 L0 0% 0.00% \$0 28 L0 0.0% 3.57% \$76 395.00 Laboratory Eq. \$0 30 R2.5 0% 0.00% \$0 28 R2.5 0.0% 3.57% \$0 \$0 396.00 Power Operated Eq. \$0 20 R2.5 0% 0.00% \$0 397.00 Communications Eq. \$90,436 30 S0 0% 3.33% \$3,012 27 S2 0.0% 3.70% \$3,346 \$21,174 398.00 Miscellaneous Eq. 25 L2 0% 0.00% \$0 24 L3 0.0% 4.17% \$883 **Total For ECORP Plant:** \$2,432,975 \$171.956 \$204.107

\$638,992

			Company's Current Depreciation Study (Dr. Ron White)								
		Adjusted Jurisdictional				Remaining Life		Whole Life			
Account Number	Description	Plant Balance 9/30/2008	VG ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	Depreciation Rate	Annual Accrual		
(1)	(2)	(3)	(14)	(15)	(16)	(17)	(18)=[(3)*(17)]	(19)	(20)=[(3)*(19)]		
	INDUSTRIAL STEAM PRODUCTION PLANT (LA	KE ROAD									
311.00	Structures and Improvements	\$2,196,997	33.68	200-SC	-3.5%	2.86%	\$62,834	3.07%	\$67,448		
312.00	Boiler Plant Eq.	\$14,541,543	33.50	200-SC	-4.3%	2.12%	\$308,281	3.11%	\$ <u>452,242</u>		
314.00	Turbogenerator Units	\$5,515	35.83	200-SC	-5.2%	2.03%	\$112	2.94%	\$ <u>162</u>		
315.00	Accessory Electric Eq.	\$634,900	35.61	200-SC	-2.5%	1.33%	\$8,444	2.88%	\$ <u>18,285</u>		
316.00	Miscellaneous Power Plant Eq.	\$ <u>32,835</u>	37.95	200-SC	-16.7%	0.31%	<u>\$10</u> 2	3.08%	\$ <u>1,011</u>		
Total f	or Industrial Steam Production Plant (Lake Road):	<u>\$17,411,79</u> 0					<u>\$379,773</u>		\$ <u>539,148</u>		
	INDUSTRIAL STEAM PRODUCTION PLANT										
311.09	Structures and Improvements	\$32,160	82.23	200-SC	-27.6%	5.90%	\$1,897	1.55%	\$498		
312.09	Boiler Plant Eq.	\$778,578	27.11	200-SC	-9.4%	4.08%	\$31,766	4.04%	\$31,455		
315.09	Accessory Electric Eq.	\$ <u>80,600</u>	40.54	200-SC	-0.9%	5.20%	\$ <u>4,191</u>	2.49%	\$ <u>2,007</u>		
	Total for Industrial Steam Production Plant:	\$ <u>891,338</u>					\$ <u>37,855</u>		\$ <u>33,960</u>		
	INDUSTRIAL STEAM DISTRIBUTION PLANT										
375.09	Structures and Improvements	\$151,660	32.29	200-SC	-3.2%	3.40%	\$5,156	3.20%	\$4,853		
376.09	Mains	\$1,660,914	39.60	200-SC	-3.4%	2.16%	\$35,876	2.61%	\$43,350		
379.09	Measuring and Regulating Station EqCity Gate	\$553,075	36.69	200-SC	-2.2%	2.81%	\$15,541	2.79%	\$15,431		
380.09	Services	\$100,842	42.97	200-SC	-0.3%	0.55%	\$555	2.33%	\$2,350		
381.09	Meters	\$ <u>412,137</u>	32.71	200-SC	-0.7%	2.62%	\$ <u>10,798</u>	3.08%	\$ <u>12,694</u>		
	Total for Industrial Steam Distribution Plant:	\$ <u>2,878,628</u>					\$ <u>26,894</u>		\$ <u>78,677</u>		

			Company's Current Depreciation Study (Dr. Ron White)							
		Adjusted Jurisdictional				Remaining Life		Whole Life		
Account Number	Description	Plant Balance 9/30/2008	VG ASL (Years)	lowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	Depreciation Rate	Annual Accrual	
(1)	(2)	(3)	(14)	(15)	(16)	(17)	(18)=[(3)*(17)]	(19)	(20)=[(3)*(19)]	
	INDUSTRIAL STEAM GENERAL PLANT (LAKE	ROAD								
390.00	Structures and Improvements	\$0	46.71	R1.5	-5.1%	2.87%	\$0	2.25%	\$0	
391.00	Office Furniture and Eq.	\$69,010	19.81	L0	1.3%	6.04%	\$4,168	4.98%	\$3,437	
391.02	Computer Hardware	\$77,006	11.46	LO	3.0%	6.43%	\$4,951	8.46%	\$6,515	
391.04	Computer Software	\$34,014	9.77	S1.5	-0.1%	4.22%	\$1,435	10.25%	\$3,486	
391.05	Computer Systems Development	\$0			0.0%	0.00%	\$0		\$0	
392.00	Transportation Eq.	\$42,582	14.57	L0.5	1.7%	-2.37%	(\$1,009)	5.70%	\$2,427	
393.00	Stores Eq.	\$128	28.18	S1.5	0.2%	-1.43%	(\$2)	3.54%	\$5	
394.00	Tools, Shop and Garage Eq.	\$73,126	30.13	S1	-8.2%	2.23%	\$1,631	3.59%	\$2,625	
395.00	Laboratory Eq.	\$55,652	29.31	S1.5	0.2%	2.27%	\$1,263	3.40%	\$1,892	
396.00	Power Operated Eq.	\$161,614	27.67	LO	7.1%	2.30%	\$3,717	3.36%	\$5,430	
397.00	Communications Eq.	\$28	26.62	02	-0.7%	3.31%	\$1	3.78%	\$1	
398.00	Miscellaneous Eq.	\$ <u>1,973</u>	29.56	R1.5	-6.3%	2.83%	\$ <u>56</u>	3.60%	\$ <u>71</u>	
Tot	al for Industrial Steam General Plant (Lake Road):	\$ <u>515,133</u>					\$ <u>16,212</u>		\$ <u>25,889</u>	
	Total For Industrial Steam Plant:	\$ <u>4,285,099</u>					\$ <u>80,961</u>		\$ <u>138,526</u>	
	ECORP PLANT									
390.00	Structures and Improvements	\$401,137								
391.00	Office Furniture and Eq.	\$443,231								
391.02	Computer Hardware	\$615,559								
391.04	Computer Software	\$859,302								
391.05	Computer Systems Development	\$0								
392.00	Transportation Eq.	\$0								
393.00	Stores Eq.	\$0								
394.00	Tools, Shop and Garage Eq.	\$2,136								
395.00	Laboratory Eq.	\$0								
396.00	Power Operated Eq.	\$0								
397.00	Communications Eq.	\$90,436								
398.00	Miscellaneous Eq.	\$ <u>21,174</u>								
	Total For ECORP Plant:	\$2,432,975								