

# **Power System**

Engineering, Inc.

Ms. Susan Duffy, Executive Director Kansas Corporation Commission

1500 Southwest Arrowhead Road

2009.03.02 13:55:59 Kansas Corporation Commission /S/ Susan K. Duffy

OFFICES IN:

MADISON, WI MINNEAPOLIS, MN DES MOINES, IA INDIANAPOLIS, IN 12301 Central Avenue, N.E., Suite 250 Blaine, MN 55434 **Telephone: 763-755-5122 Fax:** 763-755-7028 **Web:** www.powersystem.org

Via e-mail and UPS

February 27, 2009

**STATE CORPORATION COMMISSION** 

MAR 0 2 2009

Susan Talify

Subject: Wheatland Electric Cooperative, Inc. Application for Revised Rates, Tariffs, Rate Design Changes

Dear Ms. Duffy:

Topeka, KS 66604

On December 23, 2008, the Wheatland Electric Cooperative, Inc. (Wheatland) Board of Trustees approved a resolution to authorize a rate filing with the Kansas Corporation Commission (KCC). The overall effect is a requested rate increase of \$7,771,310 or 12.3 percent.

K.A.R.82-1-231a(a) affords any rural electric distribution cooperative with memberships of fewer than 15,000 to prepare a less extensive application than that outlined and required by 82-1-231. As of December 2008, Wheatland had 9,491 memberships and is thereby electing to make this rate application under 82-1-231a.

In support of this application, Wheatland submits the following information:

- Verification.
- Certification.

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- Board Resolution.
- Public Meeting Notice.
- Prefiled Direct Testimony, Exhibits and Workpapers of Richard J. Macke:
  - Exhibit (RJM-1) Curriculum Vitae Richard J. Macke.
  - Exhibit (RJM-2) Statement of Operations Present Rates.
  - Exhibit (RJM-3) Revenue Requirements.
  - Exhibit (RJM-4) Cost of Service Analysis.
    - Exhibit (RJM-5) Statement of Operations Proposed Rates.
    - Exhibit (RJM-6) Comparison of Present and Proposed Rate Schedules.
  - Exhibit (RJM-7) Comparison of Monthly Bills.

- Exhibit (RJM-8) Comparison of Phase 2 Proposed Rates.
- Exhibit (RJM-9) Present Rate Schedules
- Exhibit (RJM-10) Present Rate Schedules with Redline Proposed
  - Changes.
- Exhibit (RJM-11) Proposed Rate Schedules.
- Workpapers (A-L).

On December 12, 2008, Wheatland submitted a letter to the KCC, pursuant to K.A.R.82-1-231a, indicating our intention to file a rate application not less than 30 or more than 90 days from the date of this written notice.

On September 2, 2008 and in subsequent phone discussions, Wheatland representatives met with KCC technical staff for an initial review of the requirements and expectations for this rate application.

We look forward to working with your staff and implementing our proposed rate changes as soon as practical. If you or your staff have any questions regarding this rate application, please call me at (763) 755-5122.

Very truly yours,

Richard J. Macke

Richard J. Macke, Leader Rates and Financial Planning Power System Engineering, Inc. 12301 Central Avenue, N.E., Suite 250 Blaine, MN 55434

On behalf of: Wheatland Electric Cooperative, Inc. P.O. Box 230, 101 Main Street Scott City, KS 67871

KS0510801/mmc

cc: Neil K. Norman, Wheatland Electric Cooperative, Inc.

Enclosures

#### **VERIFICATION**

STATE OF KANSAS ) ) ss: COUNTY OF SHAWNEE

Neil K. Norman, being first duly sworn, deposes and states that he is Manager, Wheatland Electric Cooperative, Inc., applicant in the above-captioned matter; that he has read the foregoing Application and verifies that the allegations therein contained are true to the best of his knowledge, information and belief.

lora

Neil K. Norman

Subscribed and sworn to before me on this 27 day of <u>FEBRUAR</u>/2009.

VINCENT J. STRICKLER Notary Public - State of Kensy My Appl. Explrea 07

My Appointment Expires: July 10,2012

#### **CERTIFICATE OF SERVICE**

I hereby certify that on this 27 day of <u>Febru Wy</u>, 2009, a true and correct copy of the above and foregoing Application with all supporting schedules was sent overnight by United Parcel Service, properly addressed to:

Ms. Susan Duffy, Executive Director Kansas Corporation Commission 1500 Southwest Arrowhead Road Topeka, KS 66604

<u>Marilyn M. Cuellar</u> Marilyn M. Cuellar

Marilyn M. Cuellar Project Assistant Power System Engineering, Inc.

#### **BOARD RESOLUTION**

WHEREAS, Wheatland Electric Cooperative, Inc. has retained Power System Engineering, Inc. to conduct a review of the Cooperative's revenue requirements and cost of providing service to rate classes; and

WHEREAS, this review shows that Wheatland Electric Cooperative, Inc. needs to increase annual revenues in order to maintain its financial health and adequate cash position.

NOW, THEREFORE, BE IT RESOLVED, that Wheatland Electric Cooperative, Inc.'s rates be adjusted as shown on the attached Exhibit A; and

BE IT FURTHER RESOLVED, that Wheatland Electric Cooperative, Inc.'s General Manager is authorized to file the necessary documents with the Kansas Corporation Commission to implement these rates as soon as practical.

#### **CERTIFICATION**

I, Edwin Wasinger, Secretary of Wheatland Electric Cooperative, Inc., do hereby certify that the above Resolution was adopted at the regular meeting of the Board of Trustees of Wheatland Electric Cooperative, Inc., held in Scott City, Kansas, on December 23, 2008.

Lohi plan

Secretary



### **Notice of Public Meeting**

Wheatland Electric Cooperative, Inc. plans to file an application with the Kansas Corporation Commission to increase its electric rates. The amount of the proposed increase is \$7.8 million and, if granted in full, would result in an average increase of 12.2%. Comparisons of current revenues and proposed revenues and current rates and proposed rates can be found on the reverse side of this notice.

The proposed rate increase would include a Power Cost Adjustment (PCA) that would allow Wheatland to pass through changes in wholesale power costs from Sunflower, our power supplier, on a monthly basis.

A public meeting will be held to provide specific information at the following time and place:

#### Tuesday, February 24, 2009 at 1:00 p.m. William H. Carpenter Building @ Scott County Fairgrounds

Members may submit written comments to the following address:

Rate Filing Comments Wheatland Electric Cooperative, Inc. P.O. Box 230 Scott City Kansas 67871

If you have any questions, please feel free to call Wheatland's office at (620) 872-5885 or 1-800-762-0436. Ask for Lynn Freese or Neil Norman.

More information on reverse side

101 Main Street (620)-872-5885

P.O. Box 230 Toll Free (800)-762-0436 E-mail electric@weci.net Scott City, Kansas 67871 Fax (620)-872-7170

#### Comparison of Revenue Present and Proposed Rates

(a)	(b)	(c)	(d)	(e)	(f)
		Revenue	Revenue		
Line		Present	Proposed	<u>Increase (D</u>	ecrease)
No.	Rate Class	Rates	Rates	Amount	Percent
		(\$)	(\$)	(\$)	(%)
1	Residential (88-D) <sup>1</sup>	9,892,374	11,101,970	1,209,596	12.2%
2	General Service (88-GS) <sup>1</sup>	15,671,270	19,744,779	4,073,508	26.0%
3	General Service Large (88-GSL)	4,579,359	5,648,610	1,069,251	23.3%
4	Municipal Power Service (88-M)	447,512	548,340	100,828	22.5%
5	Irrigation (96-IR) <sup>1</sup>	3,281,860	4,526,468	1,244,608	37.9%
6	Transmission Level Service (2007-TRANSERV-I)	27,753,226	27,753,226	-	0.0%
7	Other Contract Rates	1,383,879	1,383,879	-	0.0%
8	Lighting	355,090	447,896	92,806	26.1%
9	Total	63,364,571	71,155,168	7,790,598	12.3%

<sup>1</sup> Includes increases proposed to occur in second phase of increase (2010).

#### Comparison of Average Rate Present and Proposed Rates

(a)	(b)	(c)	(d)	(e)	(f)
Line	,	Energy	Average	Rate	Increase
No.	Rate Class	Sales	Present	Proposed	(Decrease)
		(kWh)	(¢/kWh)	(¢/kWh)	(%)
1	Residential (88-D) <sup>1</sup>	90,080,595	10.98	12.32	12.2%
2	General Service (88-GS) <sup>1</sup>	150,743,068	10.40	13.10	26.0%
3	General Service Large (88-GSL)	57,168,879	8.01	9.88	23.3%
4	Municipal Power Service (88-M)	4,611,207	9.70	11.89	22.5%
5	Irrigation (96-IR) <sup>1</sup>	40,014,503	8.20	11.31	37.9%
6	Transmission Level Service (2007-TRANSERV-I)	426,396,830	6.51	6.51	0.0%
7	Other Contract Rates	21,046,916	6.58	6.58	0.0%
8	Lighting	2,311,203	15.36	19.38	26.1%
9	Total	792,373,201	8.00	8.98	12.3%

<sup>1</sup> Includes increases proposed to occur in second phase of increase (2010).

#### Comparison of Average Rate Present and Proposed Rates

(a)	(b)	(c)	(d)	(e)	(f)
Line		Ave. No.	<b>Average Bill</b>	Per Cons.	Increase
No.	Rate Class	Consumers	Present	Proposed	(Decrease)
		(cons.)	(\$/cons./mo.)	(\$/cons./mo.)	(\$/cons./mo.)
1	Residential (88-D) <sup>1</sup>	9,150	90.09	101.11	12.2%
2	General Service (88-GS) <sup>1</sup>	7,157	182.47	229.90	26.0%
3	General Service Large (88-GSL)	47	8,119.43	10,015.27	23.3%
4	Municipal Power Service (88-M)	112	332.97	407.99	22.5%
5	Irrigation (96-IR) <sup>1</sup>	867	315.44	435.07	37.9%
6	Transmission Level Service (2007-TRANSERV-I)	3	770,922.93	770,922.93	0.0%
7	Other Contract Rates	2	57,661.63	57,661.63	0.0%
8	Lighting	130	227.62	287.11	26.1%
9	Total	17,468	302.29	339.45	12.3%

<sup>1</sup> Includes increases proposed to occur in second phase of increase (2010).

STATE CORPORATION COMMISSION

MAR 0 2 2009

Susan Thingty

#### STATE OF KANSAS

#### BEFORE THE KANSAS CORPORATION COMMISSION

Application for Revised Rates, Tariffs, and Rate Design Changes

of

Wheatland Electric Cooperative, Inc

Docket No. 09-WHLE- 68 - RTS

February 27, 2009

#### PREFILED DIRECT TESTIMONY AND EXHIBITS RICHARD J. MACKE LEADER, RATES AND FINANCIAL PLANNING POWER SYSTEM ENGINEERING, INC.

ON BEHALF OF WHEATLAND ELECTRIC COOPERATIVE, INC.

#### STATE CORPORATION COMMISSION

MAR 0 2 2009

Susan They for

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ON BEHALF OF WHEATLAND ELECTRIC COOPERATIVE, INC.

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#### **EXHIBITS**

Exhibit (RJM-1)	-	Curriculum Vitae - Richard J. Macke
Exhibit (RJM-2)	-	Statement of Operations - Present Rates
Exhibit (RJM-3)	-	Revenue Requirements
Exhibit (RJM-4)	-	Cost of Service Analysis
Exhibit (RJM-5)	-	Statement of Operations - Proposed Rates
Exhibit (RJM-6)	-	Comparison of Present and Proposed Rate Schedules
Exhibit (RJM-7)	-	Comparison of Monthly Bills
Exhibit (RJM-8)	-	Comparison of Phase 2 Proposed Rates
Exhibit (RJM-9)	-	Present Rate Schedules
Exhibit (RJM-10)	-	Present Rate Schedules with Redline Proposed Changes
Exhibit (RJM-11)	-	Proposed Rate Schedules

	Testimony of R. J. Macke, page 1
1	PREFILED DIRECT TESTIMONY
2	RICHARD J. MACKE LEADER, RATES AND FINANCIAL PLANNING DOWED SYSTEM ENCINEEDING INC
3	POWER SYSTEM ENGINEERING, INC.
4	ON BEHALF OF <u>WHEATLAND ELECTRIC COOPERATIVE, INC.</u>
5	
6	PART I - QUALIFICATIONS
7	Q. Please state your name and business address.
8	A. My name is Richard J. Macke. My business address is 12301 Central Avenue, N.E., Suite
9	250, Blaine, Minnesota 55434.
10	
11	Q. What is your profession?
12	A. I lead the Rate and Financial Planning department at Power System Engineering, Inc.
13	("PSE"), which is headquartered at 2000 Engel Street, Suite 100, Madison, Wisconsin
14	53713.
15	
16	Q. Please describe the business activities of PSE.
17	A. Power System Engineering, Inc. is a consulting firm serving electric utilities across the
18	country, but primarily in the Midwest. Our headquarters is in Madison, Wisconsin with
19	regional offices in Indianapolis, Indiana; Minneapolis, Minnesota; and Marietta, OH. PSE
20	is involved in: power supply and system planning; distribution, substation and
21	transmission design; construction contracting and supervision; retail and wholesale rate
22	and cost of service ("COS") studies; load management and other economic feasibility
23	studies; load forecasting; financial and operating consultation; telecommunication and
24	network design, mapping/GIS; and system automation including SCADA/EMS,
25	

management systems.

**O.** Please describe your responsibilities with Power System Engineering, Inc. A. I lead PSE's Rates and Financial Planning Department. This department includes staff in Minnesota and Indiana that provides services predominantly for electric cooperative and municipal utilities such as: Cost of Service Studies; Line Extension Policies/Charges; Retail Rate Design and Analysis; Large Power Contract Rates/Proposals; Load Management Analysis; Merger Analysis; Individual Customer Profitability; Rate Consolidation; Financial Forecasting; Pole Attachment Charges: Capital Credit Allocations; Distributed Generation Rates; and Special Fees and Charges; Power Cost Adjustments. **Q.** What is your educational background? A. I graduated from Bethel University in St. Paul, Minnesota in 1996 with a Bachelor of Arts degree in Business, with an emphasis in Finance and Marketing. In 2007, I received my Master of Business Administration degree, with an emphasis in Finance and Strategic Management, from the University of Minnesota in Minneapolis, Minnesota. Q. What is your professional background?

SCADA/DMS, metering, substation automation, distribution automation and outage

A. From 1996 to 1998, I was employed by Power System Engineering, Inc. in Blaine,
Minnesota as a Financial Analyst in the Utility Planning and Rates Division. My
emphasis was on retail rate studies, including revenue requirements and
bundled/unbundled cost of service studies. I also provided analysis used to support
testimony, mergers and acquisitions cases and financial forecasting.

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From 1998 to 1999, I was employed as a Senior Analyst by Energy & Resource Consulting Group, LLC in Denver, Colorado, a financial, engineering and management consulting firm. I performed consulting services related to electric, gas and water rate studies. As part of the Legend Consulting Advisor Team contracted to the City Council of the City of New Orleans, Louisiana, I assisted in various electric and gas utility matters. I provided expert testimony and participated in various regulatory proceedings involving the City Council, the Public Utilities Commission of Texas and the Public Utilities Commission of Nevada. I also provided general financial, management and public policy support to clients.

I have been employed from 1999 to Present by Power System Engineering, Inc. in Blaine, Minnesota. From 1999 to 2002, I held the position of Rate and Financial Analyst in the Rates and Financial Planning Division. Emphasis was on performing complex financial analyses, such as rate studies consisting of determination of revenue requirements, bundled and unbundled cost of service analysis and rate design. Other responsibilities included performing analysis of special rates and programs, key account analyses, financial forecasting, activity-based costing, policy development and evaluation and other financial analyses for various PSE clients. From 2002 to March 2008, I held the position of Senior Rate and Financial Analyst in the Utility Planning and Rate Division. My responsibilities included providing senior level consulting services to clients in the areas of cost of service, rate design, financial planning and forecasting, merger and acquisition analysis and support. Additional responsibilities included strategic planning, litigation support, regulatory compliance, capital expenditure and operational assessments and advisement. From April 2008 to Present, I have held the position of Leader, Rates and

Financial Planning. In this capacity, I continue to provide rate and financial consulting services to clients in addition to managing the Rates and Financial Planning department. **O.** Please summarize your educational and work experience. A. A copy of my curriculum vitae is provided as Exhibit (RJM-1). Q. Have you previously presented testimony before the Kansas Corporation Commission ("KCC" or "Commission") relative to rate change applications? A. Yes. I recently submitted testimony on behalf of Pioneer Electric Cooperative in docket No. 09-PNRE-563-RTS. **Q.** Have you submitted testimony to other state regulatory commissions? A. Yes. I have submitted testimony to the regulatory commissions in Minnesota and Texas. O. Do you have any other rate related experience? A. Yes. I have personally directed well over 100 rate study efforts. While in many cases these rate studies were conducted for self-regulated electric cooperatives, I have also performed such analysis that was ultimately filed in regulated rate cases on behalf of cooperatives in Iowa, Kansas, Michigan, Minnesota and New Hampshire. 

<ul> <li>Q. What is the purpose of your testimony in this proceeding?</li> <li>A. The purpose of my testimony is to present the analysis of Wheatland Electric Coop</li> <li>Inc.'s ("Wheatland" or "Cooperative") revenue requirements, class cost of service</li> <li>and proposed rates within the context of the January-December 2007 Historical Te</li> <li>adjusted for known and measurable changes.</li> </ul>	ce study					
4 Inc.'s ("Wheatland" or "Cooperative") revenue requirements, class cost of service 5 and proposed rates within the context of the January-December 2007 Historical Te	ce study					
5 and proposed rates within the context of the January-December 2007 Historical T	•					
	est Year					
6 adjusted for known and measurable changes.						
7						
8 Q. Are you sponsoring any exhibits?						
9 A. Yes. I am sponsoring the following exhibits:						
10 Exhibit (RJM-1) - Curriculum Vitae - Richard J. Macke. Exhibit (RJM-2) - Statement of Operations - Present Rates.						
11Exhibit(RJM-2) - Statement of Operations - Present Rates.11Exhibit(RJM-3) - Revenue Requirements.Exhibit(RJM-4) - Cost of Service Analysis.						
12 Exhibit (RJM-5) - Statement of Operations - Proposed Rates.						
13 Exhibit (RJM-7) - Comparison of Monthly Bills.						
Exhibit (RJM-8) - Comparison of Phase 2 Proposed Rates. Exhibit (RJM-9) - Present Rate Schedules. Exhibit (RJM 10) - Present Rate Schedules with Redline Proposed Changes						
15Exhibit(RJM-10) - Present Rate Schedules with Redline Proposed Chan Exhibit(RJM-11) - Proposed Rate Schedules.	jes.					
16						
17 Q. Please identify the documents included in the workpapers you have submitted	:					
18 A. The workpapers include the following documents:						
A) Form 7 - January-December 2007.						
<ul> <li>B) Load Data.</li> <li>C) Load Data - GS, LG-IND, Contracts.</li> <li>D) Liebting Counts</li> </ul>						
<ul> <li>D) Lighting Counts.</li> <li>E) Summary and Detail of Wheatland Purchased Power (January-December 2007)</li> </ul>	er					
<ul> <li>2007).</li> <li>F) Adjustment for Known and Measurable Changes.</li> <li>C) Deard Palier No. 27 - Equity Level, Eigenviel Paties and Patients of Content of</li></ul>						
<ul> <li>G) Board Policy No. 37 - Equity Level, Financial Ratios and Patronage Ca Goals and Plans.</li> <li>D) Plant and Financial Call (Level) Devel (1997)</li> </ul>	pital					
<ul> <li>H) Plant and Expense Account Data (January-December 07).</li> <li>I) Single Phase and Three Phase Counts.</li> <li>I) Ultrational State Phase Counts.</li> </ul>						
J) Wheatland Notice of Intent to File - December 12, 2008.						

- K) Wheatland Board Resolution.
- L) Wheatland Public Meeting Notice.

# 3 Q. Has the material included in your exhibits and workpapers been prepared by you or

- by others under your direction?
- 5 A. Yes, it was.

#### **PART III - SUMMARY OF FILING**

#### **Q.** What are Wheatland's objectives in filing this rate application?

A. Wheatland has three primary objectives in filing this rate application. The first objective is financial. Wheatland has been and will be incurring significant cost increases which make an increase in rates necessary and unavoidable. This rate application will allow the Cooperative to increase operating revenues and achieve acceptable financial operating results. The second objective of this rate application is to make rate design adjustments to ensure fair recovery of costs by rate class and rate components. The Cooperative's last general rate application was in 1987-88, and much has changed concerning certain customer classes and cost structures. The third objective is to implement a Power Cost Adjustment (PCA) that will allow Wheatland to track revenue with future changes in power costs without the need for rate applications.

# Q. Would you please summarize the revenue requirement, COS study results and proposed rate design results contained in your testimony?

#### 16 A. <u>Revenue Requirements -- Summary</u>

The revenue requirements of the Cooperative simply refer to the total cost of doing business and are comprised of operating expenses plus margin requirements. By comparing the revenue requirements against present revenue, the adequacy of the present rates can be assessed; and a general change in rates can be discussed.

Operating expenses for the Cooperative (excluding interest) total \$63,560,795. We have used a Times Interest Earned Ratio (TIER) of 2.20 to determine the adequacy of present

Testimony	of R.	J.	Macke,	page 8
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rates. The result is a required revenue increase of \$7,771,310 or 12.3 percent. Table 1 2 presents a summary of revenue requirements analysis for the Test Year.

3	Table 1
4	Revenue Requirements Summary
4	Method B - TIER = 2.20 Objective (\$)
5	1.Operating Expenses (Excluding Interest)63,560,795
6	2. Margin Requirements a. Interest expense 4,650,000
7	b. Target TIER2.20c. Total Margin Requirements (Before Interest)10,230,000
8	d. Less: Capital Credits1,016,185e. Less: Non-Operating Income1,192,548
9	f. Net Operating Income Required 8,021,267
10	3. Total Revenue Requirements71,582,062
11	4. Revenue From Present Rates a. Tariff Revenue 63,364,571
12	b. Other Operating Revenue 446,181
13	c.Total Revenue63,810,7525.Required Increase (Decrease)7,771,310
14	or 12.26%
15	Class Cost of Service Summary
16	PSE performed a class COS analysis which is included in the attached Exhibit(RJM-4)
17	This analysis was aimed at identifying the cost responsibility of each rate class. The COS
18	is also useful in determining the cost components of each rate class (i.e. customer, energy
19	and demand costs). The results of the class COS analysis are summarized in the following
20	Table 2.
21	
22	
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24	

1	Table 2           Cost of Service Summary							
2		Revenue		Increase (Decrease)				
		Present	Revenue					
3	Rate Class	Rates <sup>1</sup>	Requirement	Amount	Percent <sup>2</sup>			
		(\$)	(\$)	(\$)	(%)			
4	Residential (88-D)	9,786,357	10,903,975	1,117,618	11.6			
_	Domestic Base Monthly (88-DBMC)	84,623	110,995	26,372	31.6			
5	Non-Domestic Rural (NDR)	112,844	140,136	27,292	24.5			
6	Municipal Power (88-M)	453,376	554,432	101,055	22.6 22.2			
°	Gen. Serv. (88-GS) Gen. Serv. Base Monthly (92-GSBMC)	12,174,047 1,076,756	14,838,458 1,501,587	2,664,411 424,831	40.0			
7	Gen. Serv. TOD (96-GSTOD)	2,483,167	3,109,865	626,698	40.0 25.6			
	Gen. Serv. Large (88-GSL)	268,825	282,353	13,528	5.1			
8	GS Lg. Base Monthly (92-GSLBMC)	517,230	668,677	151,446	29.7			
	Gen. Serv. Lg. TOD (96-GSLTOD)	3,853,312	4,692,016	838,705	22.1			
9	Irrigation (96-IR)	3,324,866	4,980,541	1,655,675	50.4			
	Athletic Field Lighting (88-AF)	15,609	17,712	2,103	13.6			
.0	Street & Area Lighting (88-PSL)	175,122	231,523	56,401	32.6			
	(91-SL)	169,012	234,187	65,175	39.1			
1	Total <sup>3</sup>	34,495,148	42,266,457	7,771,310	22.5			
3 4 5 6 7 8 9 0	As the above table illustrates, there are presently some cross subsidies between the rate classes with respect to cost recovery. It is important, at this point, to distinguish between the COS and actual rate design. Due to the limitations inherent to a COS analysis, these results should be viewed as providing a general range of where rates should be. It is, in fact, uncommon for rates to be designed exactly in line with COS results.							
1		i D						
2	Includes an allocated share of Other Ope	_						
23	Percentage is calculated using only ra Revenue).	ate schedule	revenue (exclude	es Other Ope	rating			
4 3 5	The class cost of service excludes rat contract rates or cost plus rates.	te classes or	consumers whicl	n are served	under			

1 Proposed Rates -- Summary

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Using the previously completed COS analysis, and in conjunction with Wheatland management and Trustees, proposed rates were developed. These rates are designed to meet various objectives of Wheatland and are discussed later in my testimony. Table 3 summarizes the impact of the proposed rates on Wheatland's rate revenue by class.

	Table 3         Comparison of Revenue         Present and Proposed Rates				
(1)	(2)	(3)	(4)	(5)	(6)
Line		Revenue Present	Revenue Proposed	Increase (Decrease)	
No.	Rate Class	Rates	Rates	Amount	Percent
		(\$)	(\$)	(\$)	(%)
1	Residential (88-D)	9,659,775	10,818,004	1,158,229	12.0
2	Domestic Base Monthly Charge (88-DBMC)	83,529	105,353	21,824	26.1
3	Domestic Cooling & Heating (88-DCH)	149,071	175,015	25,944	17.4
4	General Service (88-GS)	12,016,580	14,892,278	2,875,698	23.9
5	General Service Cooling & Heating (88-GSCH)	29,428	33,999	4,570	15.5
6	General Service Large (88-GSL)	265,348	285,719	20,371	7.7
7	Municipal Power Service (88-M)	447,512	548,340	100,828	22.5
8	Non-Domestic Rural (88-NDR)	111,384	129,565	18,180	16.3
9	Private Street & Area Lighting (88-PSL)	172,857	218,907	46,049	26.6
10	Gen. Serv. Lg. Base Mo. Charge (92-GSBMC)	510,540	644,263	133,723	26.2
11	Lg. Industrial Interruptible (LG-IND)	495,661	495,661	-	0.0
12	Public Street Lighting (91-SL)	166,826	210,706	43,880	26.3
13	Athletic Field Lighting (88-AF)	15,408	18,284	2,877	18.7
14	Gen. Serv. Base Mo. Charge (92-GSBMC)	1,062,829	1,360,964	298,135	28.1
15	Gen. Serv. Lg. TOD (96-GSLTOD)	3,803,470	4,718,628	915,158	24.1
16	Gen. Serv. TOD (96-GSTOD)	2,451,048	3,071,722	620,674	25.3
17	Irrigation (96-IR)	3,281,860	4,138,638	856,777	26.1
18	Transmission Level Service (25 MW)	15,770,401	15,770,401	-	0.0
19	SP Contract (LAKIN)	888,218	888,218	-	0.0
20	Transmission Level Service (5MW)	11,982,825	11,982,825		0.0
21	Total	63,364,571	70,507,488	7,142,917	11.3

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Because of the desire to eliminate the Base Monthly Charge rates and the impact of
achieving such, Wheatland is proposing a second phase to the rate change for those rates.
Similarly, in order to achieve the desired result for the Irrigation rate, Wheatland is

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proposing a second phase for that rate class also. The second phase rate increases would be effective 12 months subsequent to the effective date of the changes illustrated in the above Table 3. Table 4 illustrates the impact of the Phase 2 proposed rates by rate class.

	Tabl	le 4	,,		<u></u>
	Comparison Present and Propos	of Revenue	e 2)		
(1)	(2)	(3)	(4)	(5)	(6)
		Revenue	Revenue		
Line		Present	Proposed	Increase (I	
No.	Rate Class	Rates	Rates	Amount	Percent
		(\$)	(\$)	(\$)	(%)
1 D	omestic Base Monthly Charge (88-DBMC)	105,353	108,951	3,598	3.4
	en. Serv. Base Mo. Charge (92-GSBMC)	1,360,964	1,617,215	256,252	18.8
	rigation (96-IR)	4,138,638	4,526,468	387,830	9.4
4	Total	5,604,954	6,252,634	647,680	

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#### **PART IV - REVENUE REQUIREMENTS**

#### **Q.** Please summarize the concept of revenue requirements.

A. In order to ensure financial viability, the Cooperative's retail rates must generate sufficient revenue to meet operating expenses and margin requirements. The margin requirement must in turn be adequate to cover interest expense and accomplish other capital management objectives such as rotating patronage capital and maintaining (or achieving) the desired equity position. In this testimony I will refer to the total operating expense and margin requirement as the "revenue requirements" of the Cooperative. This is expressed by the following equation:

REVENUE REQUIREMENTS = OPERATING EXPENSE + MARGIN REQUIREMENT

To evaluate a cooperative's revenue requirement and the adequacy of its present rate structure to meet the requirement, it is common practice to analyze revenue and costs for a 12-month period of time called the Test Year.

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#### **Q.** What Test Year was used to determine revenue requirements?

A. The Test Year revenue requirements for the study were based on Wheatland's actual
historical operations for 12 months ending December 2007, with adjustments for known
and measurable changes.

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# Q. Have you prepared a Statement of Operations for the Test Year based on the revenue generated by Wheatland's present rates?

A. Yes. Exhibit (RJM-2) provides a Statement of Operations for the Test Year based on
 the revenue generated by Wheatland's present rates.

Page 1 of Exhibit (RJM-2) provides a summary of the Statement of Operations for the 1 2 Historical Test Year of January-December 2007. The results shown in Column (c) reflect 3 an unadjusted Test Year as actually recorded on Wheatland's books. Column (d) 4 summarizes the various normalizing adjustments to the revenue and expense accounts 5 proposed by Wheatland with the resulting adjusted Pro Forma Test Year shown in Column 6 (e). 7 Pages 2 and 3 of Exhibit (RJM-2) provide a summary of each of the proposed 8 9 adjustments. Pages 12 through 20 of Exhibit (RJM-2) provide the detailed calculations 10 for the following adjustments: 11 Payroll; Payroll benefits; 12 Depreciation; . Property taxes; Long-Term Interest Expense; 13 Rate Case Expense Amortization; 14 15 Pages 4 and 5 of Exhibit (RJM-2) present the average number of consumers, energy 16 sales, billing demand and revenue for Wheatland's rate classes as recorded for Historical 17 and Pro Forma Test Years. 18 19 Pages 6 through 10 of Exhibit (RJM-2) present the calculation of revenue under present 20 rates for the Pro Forma Test Year. That is, these pages multiply Pro Forma Test Year number of consumers, energy sales and billing demand (page 5) times appropriate service 21 22 schedule rates to determine the class and system revenue for the Pro Forma Test Year. 23 These revenue calculations are based on Wheatland's present tariffed fixed and energy and demand rates for various rate schedules. 24 25

#### Q. What are Wheatland's Test Year revenue requirements?

A. Exhibit (RJM-3) summarizes the operating results for Wheatland on both an unadjusted and an adjusted basis for the Test Year ended on December 31, 2007. A summary of the Operating Statement is provided as follows in Table 5.

5	Table 5				
6		Statement of O	perations - Prese	ent Rates	
0			12 Months Ending	Pro Forma	
7		Description	Dec. 31, 2007	Test Year	
			(\$)	(\$)	
8		Operating Revenue	60,616,389	63,810,752	
		Operating Expenses <sup>4</sup>	<u>57,520,067</u>	<u>63,560,795</u>	
9		Net Operating Income	3,096,322	249,957	
10		Non-Operating Income			
10		Capital Credits	1,016,185	1,016,185	
11		Other	<u>1,192,548</u>	<u>1,192,548</u>	
11		Subtotal	2,208,733	2,208,733	
12		Total Margins	5,305,055	2,458,690	
12					
13	It should be	emphasized that the Net O	perating Income s	tated is <u>before</u> intere	est expense on
14	long term de	bt is deducted.			
15					
16	Column D c	of Exhibit _(RJM-3) show	ws that, in order	to achieve the requ	nired TIER of
17	2.20, the pres	sent rates would need to su	pport a total reven	nue requirement of §	\$71,582,062.
18					
19	Q. How was W	heatland's margin requir	rement calculated	1?	
20	A. To complete	the Test Year Revenue Re	equirement, an ap	propriate level of m	argin must be

must be added to the previously determined operating expenses. The Wheatland Trustees have approved a TIER of 2.2 for purposes of calculating the margin requirements for this rate 

Before interest expense is deducted.

application. The TIER of 2.2 is, therefore, multiplied by the Test Year long-term interest expense of \$4,650,000.

# Q. Please identify the Operating Income required in the Test Year to achieve a 2.20 TIER.

A. To accomplish the 2.20 TIER, Wheatland needs to achieve an Operating Income (before Long-Term Interest) of \$8,021,267.

### Q. Has the TIER been endorsed by the MPUC?

A. Yes. KCC staff advises that the KCC regularly uses the TIER method in evaluating rate applications filed by electric cooperatives.

### Q. Please summarize the increase Wheatland is requesting.

A. Wheatland's present rates, which have not changed since 1987 are generating insufficient operating margins of \$249,957 in the Test Year. To achieve a TIER of 2.20, Wheatland's rates must generate \$8,021,267 of operating margin. This difference of \$7,771,310 is the amount of the shortfall and is therefore the increase required of Wheatland's retail rates. The following Table 6 presents the summary calculation.

		Table 6	IELEK.J
		<b>Revenue Requirements Summary</b> <b>Method B - TIER = 2.20 Objective</b>	
	1.	Operating Expenses (Excluding Interest)	(\$) 63,560,795
	2.	<ul> <li>Margin Requirements</li> <li>a. Interest expense</li> <li>b. Target TIER</li> <li>c. Total Margin Requirements (Before Interest)</li> <li>d. Less: Capital Credits</li> <li>e. Less: Non-Operating Income</li> <li>f. Net Operating Income Required</li> </ul>	4,650,000
	3.	Total Revenue Requirements	71,582,062
	4.	Revenue From Present Rates a. Tariff Revenue b. Other Operating Revenue c. Total Revenue	63,364,571 <u>446,181</u> 63,810,752
	5.	Required Increase (Decrease)	7,771,310 or 12.26%

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#### **PART V - COST OF SERVICE ANALYSIS**

#### **Q.** Have you prepared a Cost of Service study for Wheatland?

A. Yes. A class COS analysis has been prepared to provide information to be used in evaluating and designing proposed rates. The basic objective of this analysis is to identify the cost of providing service to each rate class as a function of load and service characteristics. The methodology employed is often referred to as the "fully allocated average embedded" COS approach meaning that 1) costs are allocated on an average system-wide basis and 2) embedded or accounting costs as recorded on the Cooperative's books are used in the analysis. We believe that this is generally the most appropriate technique to use in allocating cost responsibility to the various classes and developing rate design data.

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# Q. Does Wheatland have rates or consumers that are not necessarily handled in the best way possible in a fully allocated, average embedded COS analysis?

A. Yes. Wheatland serves some very large individual loads and wholesale accounts for
which rates are based on things like negotiated contracts and/or special wholesale rates
from Sunflower Electric Power Corporation ("Sunflower").

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#### **Q.** Were these rates included in the class COS?

A. No. The result is that the COS allocates the increase to the rate classes from which the
increase needs to be recovered.

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### Q. Please describe Exhibit \_\_(RJM-4).

A. Exhibit (RJM-4) includes the COS analysis for Wheatland. The detailed calculations 2 3 and assumptions that go into the analysis are as follows: Description 4 Page 5 1-3 Cost of Service Summary Classification of Plant in Service 4-5 6-11 **Classification of Revenue Requirements** 6 Adjusted Statement of Operations 12-14 Summary of Classification Factors 7 15-18 Summary of Allocation of Revenue Requirements to Rate Classes 19 Allocation of Plant in Service to Rate Classes 8 20 Allocation of Revenue Requirements to Rate Classes 21-23 9 24 **Rate Class Weighting Factors** Summary of Class Demands 25 Calculation of Class Demand Characteristics 26-28 10 27-30 Development of Allocation Factors. 11 12 **O.** How should the results of a COS be used? 13 A. It is vital at the outset to recognize some of the inherent limitations of such a study. First, 14 it must be emphasized that a COS analysis, while basically an engineering evaluation, is 15 an art; not an exact science. There are many different methodologies, techniques and 16 assumptions that have been and will continue to be advocated by rate analysts. Because 17 the various philosophies and assumptions can significantly affect the results of the 18 analysis, the results should be treated as providing an indication of the general range of 19 class cost responsibility; and not as precise values. 20 21 Second, a COS analysis is of necessity directed at determining the cost imposed by a rate 22 class on the system rather than at determining the cost imposed by individual customers 23

within each classification. The cost responsibility of a specific, individual consumer may

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or may not be entirely consistent with the cost allocations made to his/her assigned consumer classification. In particular, the study does not address the problem of maintaining relatively smooth transitions between the various rate classes or subclasses of customers which may be eligible to receive service under more than one rate schedule.

Third, accurate demand characteristics and load factor data for individual customer classes are often unavailable. Capacity allocations must therefore be made on the basis of estimates or "typical" data. These assumptions or estimates can have an effect on the end results.

Fourth, a COS analysis does not address itself to many of the other legitimate objectives of rate design such as customer acceptance or the avoidance of excessively abrupt changes from the historical rate policies of the cooperative. In addition, it does not recognize the need to keep each rate schedule competitive, in as much as possible, with the corresponding rate schedule of neighboring utilities or the need to keep the rate structure simple so that it is easily administered and understood by customers.

With the above limitations in mind, a COS study should be used as a guide for assigning cost responsibility (i.e., revenue requirements) to each of the customer classifications in a manner which avoids unjustifiable price discrimination. The study also provides information useful in designing the individual rate schedules and provides support for justifying rate differentials to retail customers.

1	Q. Explain the general procedure for conducting a COS study.
2	A. The basic procedure used to determine the cost responsibility of each consumer
3	classification is as follows:
4	<u>Step 1</u> - Classify the plant account records into basic cost causative categories.
5	Step 2 - Classify the Test Year expenses and margin requirement into the same cost
6	causative categories.
7	<u>Step 3</u> - Develop allocation factors for each rate class.
8	<u>Step 4</u> - Allocate costs to the various rate classes using the class allocation factors
9	developed for each cost causative category.
10	
11	Q. What do you mean by cost causative categories?
12	A. Plant investments, Test Year expenses and margin requirement are classified into the
13	following cost causative categories:
14	1. Direct - Costs which are directly attributable to one specific customer
15	classification. Expense associated with security and street lighting is an example
16	of a Direct Expense.
17	2. <u>Consumer</u> - Costs that are the result of the number and location of each customer
18	and which do not vary significantly with the demand imposed on the system or the
19	amount of energy consumed. Metering and customer accounting expenses perhaps
20	best illustrate this type of expense.
21	3. <u>Capacity</u> - Costs which result from providing and maintaining in readiness for
22	operation facilities required to meet the peak demand whether it be the system
23	peak, circuit peak or individual customer service peak. The expense of operating
24	
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1	and maintaining a three-phase backbone feeder would generally fall within this
2	category as would the demand charge from Wheatland's purchased power bills.
3	4. Energy - Costs which are related to the amount of energy used. The major item in
4	this category is the energy charge in the purchased power rate. A portion of other
5	general costs is customarily assigned to this category as well.
6	
7	Each of these general cost causative categories is further subdivided as follows:
8	Direct Consumer Capacity Energy
9	As Assigned Power Supply Power Supply Distribution Substation
10	Primary Line Line Transformer
11	Secondary & Service Meter
12	Customer Accounting
13	
14	Q. Could you briefly explain the methodology used in assigning plant accounts to cost
14 15	Q. Could you briefly explain the methodology used in assigning plant accounts to cost causative categories?
15	causative categories?
15 16	causative categories? A. The cost causative classification of the various electric plant accounts is presented on
15 16 17	<ul><li>causative categories?</li><li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant</li></ul>
15 16 17 18	<ul> <li>causative categories?</li> <li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows:</li> </ul>
15 16 17 18 19	<ul> <li>causative categories?</li> <li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows: <ol> <li>Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated</li> </ol> </li> </ul>
15 16 17 18 19 20	<ul> <li>causative categories?</li> <li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows: <ol> <li>Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations.</li> </ol> </li> </ul>
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> </ol>	<ul> <li>causative categories?</li> <li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows: <ol> <li>Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations.</li> <li>Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land</li> </ol> </li> </ul>
<ol> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> </ol>	<ul> <li>causative categories?</li> <li>A. The cost causative classification of the various electric plant accounts is presented on pages 4 and 5 of Exhibit(RJM-3). The methodology used in assigning the plant accounts to the cost causative categories is discussed as follows: <ol> <li>Intangible Plant (Acct. 301 to 303) - The Intangible Plant accounts were prorated to the cost categories in the same relationship as the distribution plant allocations.</li> <li>Land, Structures, Station and Battery (Accts. 360 to 363) - The Land and Land Rights, Structures and Improvements, Station Equipment, and Battery accounts</li> </ol> </li> </ul>

	Testimony	of R. J. Macke, page 22
1	3.	Primary Line and Devices (Accts. 364, 365, 366, 367) - The Primary Line and
2		Device accounts were assigned to the capacity component.
3	4.	Line Transformers (Acct. 368) - Classification of the Line Transformer account
4		was assigned to the capacity component.
5	5.	Services and Meters (Accts. 369 and 370) - Because the investment in Services
6		and Meters is basically independent of usage level, it was assigned entirely to the
7		customer component.
8	6.	Consumer Premise (Acct. 371) - The investment in installations on Consumer's
9		Premises was assigned to Primary Line.
10	7.	Street Lighting (Acct. 373) - Investment in street or security lighting facilities was
11		assigned directly to the Lighting Class.
12	8.	General Plant Accounts (Accts. 389 to 399) - The General Plant accounts were
13		assigned to the cost causative categories in the same relationship as the total
14		distribution plant allocations. Because the assignment of the general plant
15		investment has minimal effect on the classification of Test Year expenses, which
16		ultimately is used to determine class COS responsibility, a more detailed analysis
17		of general plant investment was not warranted.
18		
19	Q. Explai	in how revenue requirements were classified.
20	A. The A	djusted Operating Statement shown in Exhibit(RJM-4), pages 12-14, forms the
21	basis f	or the COS analysis. Actual expenses by account for the historical 12-month period
22	were u	sed to establish the pattern of the Test Year cost breakdown to the various accounts.
23		

The various components of the revenue requirements were classified to the four basic cost causative categories as presented on pages 6 through 11 of Exhibit \_\_(RJM-4). The factors used in the expense classification are summarized on pages 15 through 18 of Exhibit \_\_(RJM-4). The methodology and rationale for that methodology is discussed below:

 Purchased Power (Acct. 555) - The demand and energy charge portions of the cost of Purchased Power were assigned to the capacity and energy components, respectively.

- 2. Distribution Operation and Maintenance (Accts. 580 598) Distribution expense accounts that are related to specific plant accounts (Accts. 582, 583, 584, 585, 586, 591, 592, 593, 594, 595, 596 and 597) were classified in proportion to the corresponding plant accounts. These expenses result from operating and maintaining the distribution plant and thus may be considered plant related. The remaining distribution expense accounts (Accts. 580, 581, 587, 588, 589, 590 and 598) were prorated on the basis of the sum of the previously assigned distribution expense accounts. These accounts basically represent overhead or general distribution expenses.
- 3. <u>Consumer Accounting (Accts. 901 905)</u> Consumer Accounting expenses were assigned in total to the consumer component since this expense is basically independent of energy usage or capacity requirements. Instead, these accounts are related to the number of consumers.
  - <u>Consumer Service and Information and Sales (Accts. 907 916)</u> Consumer Service and Information and Sales expenses are also considered consumer related expenses.

Testimony	of R.	J.	Macke,	page 24	
resentony	0110	•••		Page 2 .	

5. Administrative and General (Accts. 920 - 932) - Administrative and General
(A&G) expenses are common costs for which there exists no obvious relationship
to the functional categories. Thus, we have assigned them in proportion to the
total of all other expenses without power supply.

- Depreciation and Amortization (Accts. 403 407) Depreciation and Amortization expense was allocated in proportion to the total plant account assignments.
- Property Taxes (Acct. 408) Property Taxes were assigned in proportion to the total plant account assignments.
- 8. <u>Other Taxes, Other Interest, and Other Deductions</u> Other Taxes, Other Interest, and Other Deductions were assigned in a manner similar to the A&G Accounts.
- 9. <u>Net Operating Income (Margin Requirement)</u> Since margin is comprised of interest expense, which is a function of plant investment, it is reasonable to classify this cost in proportion to the total plant assignments. This approach most nearly parallels the method used to determine target margin requirements (i.e., TIER method).

#### **Q.** Discuss the allocation of costs to rate classes.

18 A. The allocation of the revenue requirement to each consumer classification is presented on
 19 page 19 of Exhibit (RJM-4). The allocations are based on various allocation factors that
 20 reflect certain cost causative drivers as discussed below:

  <u>Direct Cost Allocation</u> - Costs specifically associated with street or security lighting facilities (investment and O&M) directly assigned to the Lighting Class are an example of a possible direct cost allocation.

2. <u>Consumer Costs Allocations</u> - Generally speaking, consumer related costs were allocated to the various classes on the basis of the total number of consumers in each class. However, several adjustments were made in the general allocation procedure to reflect differences in the cost of providing basic service. Weighting factors were developed on page 24 of Exhibit \_\_(RJM-4) to recognize the higher cost of three-phase service versus standard single-phase service for each subcategory of consumer related cost. A "weighting factor" of 0.02 was used to allocate the consumer expense related to providing basic service to an individual security or street light. Because these lights make use of facilities and services which have been primarily provided for under other rate schedules, it may be argued that it costs no more to prepare a bill for a consumer with a security light than for one without. However, it seems only fair that the lighting classes should be required to pay at least a token portion of the consumer related expense; hence, the 0.02 weighting factor.

- <u>Capacity Cost Allocations</u> Three different allocation factors were developed for the capacity component. (See pages 25 to 28 of Exhibit \_\_(RJM-4) for the development of class demands):
  - a. Line transformer capacity related costs were allocated in accordance with the estimated average monthly, undiversified non-coincidental peak demand of each consumer in each class as this definition of demand most closely approximates transformer capacity requirements.
  - b. Primary line capacity allocated costs were allocated using the Average and Excess Demand Method based on the average monthly coincidental demand for each class (not necessarily coincidental with the system). Distribution

1	system capacity related costs are a function not only of the system peak, but
2	also the individual circuit and even consumer peak demand. The Average and
3	Excess Demand Method gives recognition to the average demand imposed on
4	the system by each class as well as the average monthly peak demand of the
5	class (non-coincidental) and prevents any class from getting a "free ride" from
6	a capacity standpoint.
7	c. Purchased power demand charges and distribution substation capacity costs
8	were allocated in accordance with the average monthly coincidental class
9	demands for the summer and non-summer seasons.
10	4. Energy Cost Allocations - Energy related costs were allocated on the basis of total
11	energy sales in each rate class.
12	
13	Allocation factors for each category are developed on pages 29 and 30 of Exhibit(RJM-
14	4).
15	
16	Q. Please summarize the results of the COS study you performed for Wheatland.
17	A. Results obtained from the COS analysis are summarized in Tables 7, 8 and 9 on the
18	following pages. Table 7 provides a comparison of the calculated cost of providing
19	service to each rate class with the revenue generated under the present rates by that class.
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1	Cost	Table 7 of Service Su	mmary	<u></u>	
2		Revenue	innar y	Increase (I	)ecrease)
		Present	Revenue		
3	Rate Class	Rates <sup>5</sup>	Requirement	Amount	Percent <sup>6</sup>
		(\$)	(\$)	(\$)	
4	Residential (88-D)	9,786,357	10,903,975	1,117,618	11.6
	Domestic Base Monthly (88-DBMC)	84,623	110,995	26,372	31.6
5	Non-Domestic Rural (NDR)	112,844	140,136	27,292	24.5
	Municipal Power (88-M)	453,376	554,432	101,055	22.6
6	Gen. Serv. (88-GS)	12,174,047	14,838,458	2,664,411	22.2
-	Gen. Serv. Base Monthly (92-GSBMC)	1,076,756	1,501,587	424,831	40.0
7	Gen. Serv. TOD (96-GSTOD)	2,483,167	3,109,865	626,698	25.6
8	Gen. Serv. Large (88-GSL)	268,825	282,353	13,528	5.1
0	GS Lg. Base Monthly (92-GSLBMC)	517,230	668,677	151,446	29.7
9	Gen. Serv. Lg. TOD (96-GSLTOD)	3,853,312	4,692,016	838,705	22.1
	Irrigation (96-IR)	3,324,866	4,980,541	1,655,675	50.4
10	Athletic Field Lighting (88-AF) Street & Area Lighting (88-PSL)	15,609 175,122	17,712 231,523	2,103 56,401	13.6 32.6
	(91-SL)	169,012	231,523	65,175	32.0 39.1
11	Total <sup>7</sup>	34,495,148	42,266,457	7,771,310	22.5
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22	<sup>5</sup> Includes an allocated share of Other Ope	erating Reven	16		
22	mendees an anotated share of other ope	ating ite vent			
23	<sup>6</sup> Percentage is calculated using only ra	ate schedule i	revenue (exclude	es Other Ope	rating
25	Revenue).		× ×		U
24					
_ ·	<sup>7</sup> The class cost of service excludes rat	e classes or	consumers whicl	n are served	under
25	contract rates or cost plus rates.				
i	1				

Table 8 shows a breakdown of the COS by cost category for each class.

· · · · · · · · · · · · · · · · · · ·	Cos	Table 8 st Allocation Su	mmary			
	Power Suppl	ly	Trans-	Distribution		Total
Rate Class	Capacity	Energy	mission	Consumer	Capacity	COS
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Residential (88-D)	1,633,338	3,826,270	35,648	1,153,474	4,255,246	10,903,975
Domestic Base Monthly (88-DBMC)	18,208	39,776	382	8,336	44,293	110,995
Non-Domestic Rural (NDR)	16,380	30,789	315	54,313	38,339	140,136
Municipal Power (88-M)	81,719	203,907	1,829	45,422	221,555	554,432
Gen. Serv. (88-GS)	2,608,873	4,738,372	49,876	2,024,480	5,416,855	14,838,458
Gen. Serv. Base Monthly (92-GSBMC)	265,790	608,649	5,779	9,346	612,024	1,501,587
Gen. Serv. TOD (96-GSTOD)	497,086	1,262,825	11,515	117,560	1,220,879	3,109,865
Gen. Serv. Large (88-GSL)	46,914	117,366	1,099	1,739	115,234	282,353
GS Lg. Base Monthly (92-GSLBMC)	104,501	293,673	2,548	2,318	265,636	668,677
Gen. Serv. Lg. TOD (96-GSLTOD)	674,516	2,116,956	17,806	23,183	1,859,554	4,692,016
Irrigation (96-IR)	542,965	1,769,433	20,404	476,964	2,170,774	4,980,54
Athletic Field Lighting (88-AF)	512	2,391	23	12,436	2,351	17,712
Street & Area Lighting (88-PSL)	7,896	34,654	339	153,610	35,024	231,523
(91-SL)	14,571	65,156	633	88,533	65,294	234,187
Total	6,513,271	15,110,217	148,196	4,171,714	16,323,059	42,266,457

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Table 9 provides total costs by class expressed in terms of \$/customer/month (consumer

component) and  $\phi/kWh$  (capacity and energy components).

15	Table 9 Unit Cost Summary								
16	Rate Class	Power Capacity	Supply Energy	Trans- Mission	Distrit Consumer	oution Capacity	Total Cost		
17		(¢/kWh)	(¢/kWh)	(¢/kWh)	(\$/mo.)	(¢/kWh)	(¢/kWh)		
	Residential (88-D)	1.89	4.42	0.04	10.85	4.92	12.60		
18	Domestic Base Monthly (88-DBMC)	2.02	4.42	0.04	10.85	4.92	12.34		
	Non-Domestic Rural (NDR)	2.35	4.42	0.05	10.98	5.51	20.13		
19	Municipal Power (88-M)	1.77	4.42	0.04	33.80	4.80	12.02		
	Gen. Serv. (88-GS)	2.43	4.42	0.05	26.10	5.06	13.85		
20	Gen. Serv. Base Monthly (92-GSBMC)	1.93	4.42	0.04	38.94	4.45	10.91		
	Gen. Serv. TOD (96-GSTOD)	1.74	4.42	0.04	40.82	4.28	10.89		
21	Gen. Serv. Large (88-GSL)	1.77	4.42	0.04	48.30	4.34	10.64		
	GS Lg. Base Monthly (92-GSLBMC)	1.57	4.42	0.04	48.30	4.00	10.07		
22	Gen. Serv. Lg. TOD (96-GSLTOD)	1.41	4.42	0.04	48.30	3.88	9.80		
	Irrigation (96-IR)	1.36	4.42	0.05	45.84	5.42	12.45		
23	Athletic Field Lighting (88-AF)	0.95	4.42	0.04	19.06	4.35	32.76		
<sup>2</sup> <sup>3</sup>	Street & Area Lighting (88-PSL)	1.01	4.42	0.04	0.22	4.47	29.54		
24	(91-SL)	0.99	4.42	0.04	0.22	4.43	15.89		
2 <b>4</b>	Total	1.91	4.42	0.04	14.83	4.78	12.37		

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1	Q. Is any other cost analysis included in this filing besides the class COS study?
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Testimony of R. J. Macke, page 3	Testimony	of R.	J.	Macke,	page	3(
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1	<u>PART VI - RATE DESIGN</u>
2	Various tables showing the results of the COS analysis are useful in discussing the design and
3	evaluation of Wheatland's rates. These tables, which have been previously presented, are
4	listed below:
5	Table Description
6 7	Table 7Cost of Service SummaryTable 8Cost Allocation SummaryTable 9Unit Cost Summary
8	
9	Q. What objectives have you considered while developing proposed rate changes?
10	A. There are many legitimate objectives that influence the design of rates. Some of the more
11	important ones are as follows:
12	1. The proposed rates must develop the requisite total revenue.
13	2. The proposed rates should reflect the cost of providing service. No class or
14	subclass should subsidize or be subsidized by another.
15	3. The rate schedules should be simple and concise to facilitate consumer acceptance
16	and administration.
17	4. Abrupt departures from historical rate practices and levels should be avoided.
18	5. The rate structure should be acceptable to the membership.
19	6. Where there is a possibility of a consumer being eligible to receive service under
20	more than one rate schedule, the transition should be made as smoothly as
21	possible.
22	7. The rates should promote the efficient use of energy and system capacity.
23	8. Whenever possible, the rate schedule should be competitive with those of
24	neighboring utilities and alternative energy sources.
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It is generally not possible to fully accomplish all of the above objectives in developing rate schedules. Compromises based on judgment reflecting the policy of the Cooperative must be made.

#### **Q.** Please describe how the proposed rates were developed.

A. The first step in designing the proposed rates was to establish the proposed or targeted increase for each class. While the COS analysis played an important role in establishing the targeted increase for each class, other rate design objectives such as 1) the need to avoid abrupt changes and 2) the desire to achieve member-consumer acceptance also came into play. Thus, the dollar and percentage increase or decrease for each class as shown in Table 6 were tempered by experienced judgment in order to accomplish the overall rate design objectives.

# Q. Please explain your rationale for deviating from the COS study in establishing the targeted class rate increases.

A. There are several reasons why I chose to deviate from a strict application of the COS analysis. First, in my opinion, it is generally undesirable to decrease any rate when requesting a general rate increase. On the other hand, increasing the rates charged a specific rate class by an amount which is substantially greater than the average overall rate increase is also undesirable as it may pose a hardship for the consumers in that class. In general, it is my belief that the principle of rate moderation (i.e., the need to avoid abrupt changes) should be used to temper the results of the COS analysis when possible.

# Q. Have you established general guidelines for distributing the requisite rate increase to the various classes?

A. Yes. Recognizing the principle of "rate moderation" and the principle of "member acceptance," I have adopted the following general guidelines in distributing the requisite rate increase to the various classes:

- 1. No class should receive an increase greater than two-and-one-half times the average increase.
  - 2. No class should receive a rate decrease.

10 One consequence of applying these guidelines is that a two-phase adjustment is being 11 proposed to achieve the change needed in three rate classes. I will discuss this in more 12 detail in later portions of my testimony.

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## **Q.** Summarize the revenue impact of your proposed rates.

A. The rate design recommendations contained and discussed herein result in a \$7,790,598
revenue increase or 12.3 percent. This is being proposed to occur in two steps or phases.
The majority of the increase (92 percent) will occur immediately upon KCC order and will
affect the rate classes as shown in Table 10.

(1) Line No.	(2)	(3) Revenue	(4)	(7)	
		Present	Revenue Proposed	(5) Increase (D	(6) ecrease)
	Rate Class	Rates	Rates	Amount	Percen
		(\$)	(\$)	(\$)	(%)
1	Residential (88-D)	9,659,775	10,818,004	1,158,229	12.0
	Domestic Base Monthly Charge (88-DBMC)	83,529	105,353	21,824	26.1
3	Domestic Cooling & Heating (88-DCH)	149,071	175,015	25,944	17.4
4	General Service (88-GS)	12,016,580	14,892,278	2,875,698	23.9
5	General Service Cooling & Heating (88-GSCH)	29,428	33,999	4,570	15.5
6	General Service Large (88-GSL)	265,348	285,719	20,371	7.7
7	Municipal Power Service (88-M)	447,512	548,340	100,828	22.5
	Non-Domestic Rural (88-NDR)	111,384	129,565	18,180	16.3
	Private Street & Area Lighting (88-PSL)	172,857	218,907	46,049	26.6
	Gen. Serv. Lg. Base Mo. Charge (92-GSBMC)	510,540	644,263	133,723	26.2
	Lg. Industrial Interruptible (LG-IND)	495,661	495,661	~	0.0
	Public Street Lighting (91-SL)	166,826	210,706	43,880	26.3
	Athletic Field Lighting (88-AF)	15,408	18,284	2,877	18.7
	Gen. Serv. Base Mo. Charge (92-GSBMC)	1,062,829	1,360,964	298,135	28.1
	Gen. Serv. Lg. TOD (96-GSLTOD)	3,803,470	4,718,628	915,158	24.1
	Gen. Serv. TOD (96-GSTOD)	2,451,048	3,071,722	620,674	25.3
	Irrigation (96-IR)	3,281,860	4,138,638	856,777	26.1
	Transmission Level Service (25 MW)	15,770,401	15,770,401	-	0.0
	SP Contract (LAKIN) Transmission Level Service (5MW)	888,218 11,982,825	888,218	-	0.0 0.0
20	Total	63,364,571	<u>11,982,825</u> 70,507,488	7,142,917	11.3
<u> </u>	10(2)	05,504,571	70,507,488	7,142,717	11.2
12	he second phase of the increase will only affe 2 months after the effective date of Phase 1. The Table 11.			_	
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1 2	Table 11Comparison of RevenuePresent and Proposed Rates (Phase 2)						
	(1)	(2)	(3)	(4)	(5)	(6)	
3			Revenue	Revenue			
	Line		Present	Proposed	Increase (I	)ecrease)	
4	No.	Rate Class	Rates	Rates	Amount	Percent	
-			(\$)	(\$)	(\$)	(%)	
2	1	Domestic Base Monthly Charge (88-DBMC)	105,353	108,951	3,598	3.4	
	2	Gen. Serv. Base Mo. Charge (92-GSBMC)	1,360,964	1,617,215	256,252	18.8	
6	3	Irrigation (96-IR)	4,138,638	4,526,468	387,830	9.4	
-	4	Total	5,604,954	6,252,634	647,680		

#### **Q.** Why is it necessary to include a two-phase rate proposal?

A. For administrative, cost of service and public policy reasons, Wheatland is proposing to
eliminate the Base Monthly Charge rates. Doing so and moving members directly to the
applicable rate creates a very substantial increase -- greater than two-and-one-half times
the average. Wheatland, therefore, is requesting this change be broken into two phases so
that the impact is more gradual.

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In addition, the increase required of the Irrigation rate exceeded the two-and-one-half guideline so a two-phase approach is also requested for that rate class.

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# Q. Please describe the proposed Power Cost Adjustment (PCA).

A. Around the country, including in Kansas, electric utilities use Power Cost Adjustments
(PCA) in some form to automatically track changes in costs for power supply costs.
Wheatland does not presently have a PCA; and so, when confronted with changes in its
cost of purchasing power from Sunflower, it has had no way of adjusting what it collects
from member-consumers except by changing its base rate via regulatory process.

Implementing a PCA will provide Wheatland with a mechanism to better track revenue with purchased power costs.

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#### Q. What type of PCA is Wheatland proposing?

A. Because Wheatland owns no generating facilities and thereby purchases all of its power requirements from Sunflower, Wheatland proposes a PCA that captures changes in its total cost of purchased power. Again, Wheatland desires to avoid a situation whereby a wholesale rate change by Sunflower would require Wheatland to make its own retail rate filing.

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#### **Q.** Have you determined the base to be used in calculating the future PCA?

A. Yes. Based on the purchased power expense for the Test Year, I have calculated a base
cost per kWh sold of 62.2 mills or \$0.0622. Per the PCA Schedule included in the
proposed rate tariffs, Wheatland will charge or credit bills based on monthly variations
from this base cost.

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#### 17 **Q.** Please describe the proposed rates.

18 || A. Discussion of each of the proposed rates follows.

#### Residential (88-D)

The COS study shows the need to increase revenue from the Residential (88-D) class by \$1,117,618 or a 11.6 percent increase (see Table 10) over revenue from present rates. Wheatland proposes to increase the Customer Charge from the present \$3.80 to \$6.00. The COS study shows that the consumer related costs for this class are \$10.85 per consumer per month. While Wheatland's present Customer Charge is far below

this amount and low compared to other cooperatives in the State, the proposed \$6.00 Customer Charge is a significant step in the right direction. The present Energy Charge of \$0.1057/kWh is proposed to increase to \$0.11600/kWh. These proposed rates result in an increase to the Residential class of approximately 12.0 percent. For a range of increases over various consumption levels, please see Exhibit \_\_(RJM-7), pages 1 and 2. A comparison of the present and proposed rates is shown as follows in Table 12.

Table 12Comparison of Present and ProposedResidential (88-D)							
Description	Present Rate	Description	Proposed Rate				
Customer Charge	\$3.80/mo.	Customer Charge	\$6.00/mo.				
Minimum Bill-Town & Village	\$6.00/mo.	Minimum Bill-Town & Village	\$8.40/mo.				
Energy Charge	\$0.10570/kWh	Energy Charge	\$0.11600/kWh				

#### **Domestic Base Monthly Charge (88-DBMC)**

The COS study shows a required revenue increase from Domestic Base Monthly Charge (88-DBMC) consumers of \$26,372 or 31.6 percent. Wheatland proposes to eliminate this rate and move the affected consumers to the proposed Residential (88-D) rate. It is further proposed that this occur in two phases. The first step will be to move the consumers to the rate structure that bills all current consumption at a uniform Energy Charge. This Energy Charge will be slightly lower than the proposed Energy Charge for the Residential rate so as to moderate the increase somewhat. This Phase 1 change is expected to produce an increase of 26.1 percent. A comparison of the present and proposed Phase 1 rates is shown as follows in Table 13.

Description	Present Rate	Description	Proposed Rate
Customer Charge	\$3.80/mo.	Customer Charge	\$6.00/mo.
Minimum Bill-Town & Village	\$3.80/mo.	Minimum Bill-Town & Village	\$8.50/mo.
Current Energy Charge Base Period Energy- Summer	\$0.10570/kWh \$0.06670/kWh	Energy Charge	\$0.11200/kW
Base Period Energy- Winter	\$0.05670/kWh		

\$0.116/kWh rate. This results in an additional 3.4 percent increase. A comparison of

the present versus proposed Phase 2 rates is shown as follows in Table 14.

Table 14         Comparison of Present and Proposed Phase 2         Domestic Base Monthly Charge (88-DBMC)						
Description	Present Rate	Description	Proposed Rate			
Customer Charge	\$3.80/mo.	Customer Charge	\$6.00/mo.			
Minimum Bill-Town & Village	\$3.80/mo.	Minimum Bill-Town & Village	\$8.50/mo.			
Current Energy Charge	\$0.10570/kWh	Energy Charge	\$0.11600/kWh			
Base Period Energy- Summer	\$0.06670/kWh	0. 0				
Base Period Energy- Winter	\$0.05670/kWh					

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# Domestic Cooling & Heating (88-DCH)

The Domestic Cooling & Heating (88-DCH) rate is intended to provide a reduced rate for consumers that have electric cooling and heating installed at their residence. The rates charged in the summer vary depending on whether or not the cooling load is controlled (cycled) during peak times. Wheatland proposes to maintain the present

\$0.20 per month differential between the Customer Charge in this rate and the standard Residential rate. Wheatland also proposes to increase the non-controlled Summer Energy Charge per the Residential Energy charge. The controlled Summer Energy Charge and Winter Energy Charge will each be increased \$0.0078/kWh to \$0.067/kWh and \$0.057/kWh, respectively. These proposed rates result in an increase of 17.4 percent for this class. A comparison of the present and proposed rates is shown as follows in Table 15.

Table 15Comparison of Present and ProposedDomestic Cooling & Heating (88-DCH)				
Description	Present Rate	Description	Proposed Rate	
Customer Charge	\$4.00/mo.	Customer Charge	\$6.20/mo.	
Energy Charge		Energy Charge		
Summer (Jun-Sep)	\$0.10570/kWh	Summer (Jun-Sep)	\$0.11900/kWh	
Summer LM (Jun-Sep)	\$0.05920/kWh	Summer LM (Jun-Sep)	\$0.06700/kWh	
Winter (Oct-May)	\$0.04920/kWh	Winter (Oct-May)	\$0.05700/kWh	

#### General Service (88-GS)

The COS study shows the need to increase revenues from the General Service (88-GS) class in the amount of \$2,664,411 or 22.2 percent. Wheatland proposes to increase the Customer Charge from the present \$6.00/month to \$10.00/month. This is still below the COS results of \$26.10/month; however, it is a substantial step in that direction. The present Demand Charge is also substantially below COS. Wheatland proposes to increase the Demand Charge from \$6.00/kW to \$9.45/kW to better recover power supply and distribution capacity costs. Finally, the current four-step, load-factor based Energy Charge structure is proposed to be simplified to a two-step structure. These proposed rates result in an increase of 22.5 percent for this class. For a range of

increases over various consumption levels, please see Exhibit \_\_(RJM-7), pages 3 and

4. A comparison of the present and proposed rates is shown as follows in Table 16.

(		le 16 esent and Proposed vice (88-GS)	
	Present		Proposed
Description	Rate	Description	Rate
Customer Charge	\$6.00/mo.	Customer Charge	\$10.00/mo.
Demand Charge	\$6.00/kW	Demand Charge	\$9.45/kW
Energy Charge		Energy Charge	
First 125 kWh/kW	\$0.08670/kWh	First 375 kWh/kW	\$0.08800/kW
Next 125 kWh/kW	\$0.07670/kWh	Over 375 kWh/kW	\$0.05700/kW
Next 125 kWh/kW	\$0.06670/kWh		
Over 375 kWh/kW	\$0.05420/kWh		
rate. These proposed rates	e the same as the l result in an increas	C <b>H)</b> Domestic Cooling & Heating we of about 15.5 percent for the shown as follows in Table	this class. A
This rate is proposed to be rate. These proposed rates comparison of the present a	e the same as the line result in an increase and proposed rates <b>Tat</b>	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table <b>le 17</b>	this class. A
This rate is proposed to be rate. These proposed rates comparison of the present a	e the same as the l result in an increas and proposed rates Tat Comparison of Pr	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table le 17 esent and Proposed	this class. A
This rate is proposed to be rate. These proposed rates comparison of the present a	e the same as the l result in an increas and proposed rates Tat Comparison of Pr	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table <b>le 17</b>	this class. A
This rate is proposed to be ate. These proposed rates comparison of the present a	e the same as the l result in an increas and proposed rates Tak Comparison of Pr ral Service Coolin	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table le 17 esent and Proposed	this class. A 17.
This rate is proposed to be rate. These proposed rates comparison of the present a Gene	e the same as the l result in an increas and proposed rates Tak Comparison of Pr ral Service Coolin Present	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table the 17 esent and Proposed g & Heating (88-GSCH)	this class. A 17. Proposed
This rate is proposed to be rate. These proposed rates comparison of the present a Gene Description	e the same as the l result in an increas and proposed rates Tak Comparison of Pr ral Service Coolin Present Rate	Domestic Cooling & Heating te of about 15.5 percent for the s shown as follows in Table le 17 esent and Proposed g & Heating (88-GSCH) Description	this class. A 17. Proposed Rate
This rate is proposed to be rate. These proposed rates comparison of the present a Gene Description Customer Charge	e the same as the l result in an increas and proposed rates Tak Comparison of Pr ral Service Coolin Present Rate	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table le 17 esent and Proposed g & Heating (88-GSCH) Description Customer Charge	this class. A 17. Proposed Rate \$6.20/mo.
This rate is proposed to be rate. These proposed rates comparison of the present a Gene Description Customer Charge Energy Charge	e the same as the l result in an increas and proposed rates Tak Comparison of Pr ral Service Coolin Present Rate \$4.00/mo.	Domestic Cooling & Heating the of about 15.5 percent for the s shown as follows in Table ole 17 esent and Proposed g & Heating (88-GSCH) Description Customer Charge Energy Charge	this class. A 17. Proposed Rate

## General Service Large (88-GSL)

The COS study shows the need to increase revenues from the General Service Large (88-GSL) class in the amount of \$13,528 or 5.1 percent. Similar to the General Service proposal, Wheatland proposes to increase the Customer Charge and Demand Charge and reduce the number of blocks in the Energy Charge to better reflect COS

results. Overall, the proposed rates result in a \$20,371 increase. For a range of increases over various consumption levels, please see Exhibit \_\_(RJM-7), pages 5 and 6. A comparison of the present and proposed rates is shown as follows in Table 18.

Table 18Comparison of Present and ProposedGeneral Service Large (88-GSL)				
Description	Present Rate	Description	Proposed Rate	
Customer Charge	\$6.00/mo.	Customer Charge	\$10.00/mo.	
Demand Charge	\$12.00/kW	Demand Charge	\$14.10/kW	
Energy Charge		Energy Charge		
First 125 kWh/kW	\$0.06170/kWh	First 375 kWh/kW	\$0.05900/kWł	
Next 125 kWh/kW	\$0.05670/kWh	Over 375 kWh/kW	\$0.04920/kWł	
Next 125 kWh/kW	\$0.05420/kWh			
Over 375 kWh/kW	\$0.04920/kWh			

## Municipal Power Service (88-M)

The COS study shows there is a need to increase the Municipal Power Service (88-M) rate by \$101,055 or 22.6 percent. To achieve this, Wheatland proposes to increase the Customer Charge from \$6.00/month to \$10.00/month as in the General Service rate and to set the Energy Charge equal to the Residential Energy Charge. The proposed rates result in an increase of \$100,828 or 22.5 percent. A comparison of the present and proposed rates is shown as follows in Table 19.

	Comparison of Pro	le 19 esent and Proposed er Service (88-M)	
Description	Present Rate	Description	Proposed Rate
Customer Charge Energy Charge	\$6.00/mo. \$0.09530/kWh	Customer Charge Energy Charge	\$10.00/mo. \$0.11600/kW

## Non-Domestic Rural (88-NDR)

The COS shows that Wheatland could justify increasing the Non-Domestic Rural (88-NDR) rate by \$27,292 or 24.5 percent. This rate has historically been tied to the

Residential rate, which Wheatland proposes to maintain. The result is an increase of \$18,180 or 16.3 percent. The following Table 20 compares the present versus proposed rates.

Table 20Comparison of Present and ProposedNon-Domestic Rural (88-NDR)				
Description	Present Rate	Description	Proposed Rate	
Annual Customer Charge	\$45.60/mo.	Annual Customer Charge	\$72.00/mo.	
Annual Minimum: <10 kVA	\$144.00/year	Annual Minimum: <10 kVA	\$204.00/year	
Annual Minimum: >10 kVA	\$12.00/kVA	Annual Minimum: >10 kVA	\$17.00/kVA	
Energy Charge	\$0.10570/kWh	Energy Charge	\$0.11600/kWl	

# Private Street & Area Lighting (88-PSL)

The COS shows the need to increase the Private Street & Area Lighting (88-PSL) rate by \$56,401 or 32.5 percent. In particular, the COS suggests that the rates for metered lights are substantially under priced. The proposed rates result in an increase of \$46,049 or 26.6 percent. The following Table 21 compares the present and proposed rates.

Table 21Comparison of Present and ProposedPrivate Street & Area Lighting (88-PSL)				
Description	Present Rate	Description	Proposed Rate	
Metered Lights		Metered Lights		
175 W MW	\$2.18/mo.	175 W MV	\$3.50/mo.	
250 W MV	\$2.45/mo.	250 W MV	\$3.93/mo.	
400 W MV	\$3.27/mo.	400 W MV	\$5.25/mo.	
Unmetered Lights		Unmetered Lights		
175 W MW	\$9.54/mo.	175 W MV	\$10.50/mo.	
250 W MV	\$13.43/mo.	250 W MV	\$13.50/mo.	
400 W MV	\$23.65/mo.	400 W MV	\$23.65/mo.	

## General Service Large Base Monthly Charge (92-GSBMC)

The COS results show the need to increase the General Service Large Base Monthly Charge (92-GSBMC) by \$151,446 or 29.7 percent. As is the case with all of Wheatland's Base Monthly Charge rates, this rate would be eliminated with consumers transferring to the standard General Service Large rate. The impact is an increase of \$122,723 or 26.2 percent. A comparison of the present and proposed rates is shown as follows in Table 22.

Table 22Comparison of Present and ProposedGeneral Service Large Base Monthly Charge (92-GSBMC)			
Description	Present Rate	Description	Proposed Rate
		Customer Charge	\$10.00/month
Current Demand Charge	\$8.00/kW	Demand Charge	\$14.10/kW
Energy Charge		Energy Charge	
First 125 kWh/kW	\$0.06170/kWh	First 375 kWh/kW	\$0.05900/kW
Next 125 kWh/kW	\$0.05670/kWh	Over 375 kWh/kW	\$0.04920/kWl
Next 125 kWh/kW	\$0.05420/kWh		
Over 375 kWh/kW	\$0.04920/kWh		
Base Demand Charge	\$8.00/kW		`
Base Energy Charge	\$0.04500/kWh		

#### Large Industrial Interruptible (LG-IND)

The Large Industrial Interruptible (LG-IND) rate is for a particular contract rate consumer. It contains an Energy Cost Adjustment (ECA) component that will adjust to collect increased ECA costs of Wheatland. As such, Wheatland is not proposing any base rate changes for this rate. The rate is as shown as follows in Table 23.

Table 23Comparison of Present and ProposedLarge Industrial Interruptible (LG-IND)			
Description	Present Rate	Description	Proposed Rate
Demand Charge	\$12.00/kW	Demand Charge	\$12.00/kW
Penalty Demand Charge	\$20.00/kW	Penalty Demand Charge	\$20.00/kW
Energy Charge	\$0.04000/kWh	Energy Charge	\$0.04000/kWł
Fuel Adjustment Clause	\$0.02225/kWh	Fuel Adjustment Clause	\$0.02225/kWl

## Public Street Lighting (91-SL)

The COS results show the need for the Public Street Lighting (91-SL) class to be increased \$65,175 or 39.1 percent. The proposed rates result in an increase of \$43,880 or 26.3 percent. A comparison of the present and proposed rates is shown as follows in Table 24.

Table 24Comparison of Present and ProposedPublic Street Lighting (91-SL)				
Present Rate	Description	Proposed Rate		
\$0.11320/kWh	Metered Lights	\$0.14300/kWh		
	Unmetered Lights			
\$4.53/month	100 W HPS	\$5.72/month		
\$7.36/month	175 W MV	\$9.30/month		
\$10.98/month	250 W MV/HPS	\$13.87/month		
\$20.38/month	400 W MV/HPS	\$25.74/month		
	Public Street	Public Street Lighting (91-SL)Present RateDescription\$0.11320/kWhMetered Lights Unmetered Lights\$4.53/month100 W HPS \$7.36/month\$10.98/month250 W MV/HPS		

## Athletic Field Lighting (88-AF)

The COS shows the need to increase the Athletic Field Lighting (88-AF) class by \$2,103 or 13.6 percent. Wheatland proposes to increase the annual Customer Charge from \$6.00/year to \$8.00/year and to set the Energy Charge at the same rate as the Public Street Lighting Energy rate. The result is an increase of 18.7 percent. A comparison of the present and proposed rates is shown as follows in Table 25.

	Comparison of P	ble 25 Present and Proposed Lighting (88-AF)	
Description	Present Rate	Description	Proposed Rate
Customer Charge	\$6.00/year	Customer Charge	\$8.00/year
Minimum Charge	\$0.60/kVA	Minimum Charge	\$0.65/kVA
Energy Charge	\$0.10170/kWh	Energy Charge	\$0.14500/kWh

# General Service Base Monthly Charge (92-GSBMC)

The COS shows a need to increase the General Service Base Monthly Charge (92-GSBMC) by \$424,831 or 40 percent. As is the case with all of Wheatland's Base Monthly Charge rates, this rate would be eliminated with consumers transferring to the standard General Service rate. Since doing so in one step would cause an increase exceeding two-and-one-half times the average, Wheatland proposes to achieve this objective in two phases. Phase 1 will include removing the Base Monthly Charges and increasing the end block Energy Charge. The increase resulting from this Phase is 28.1 percent. A comparison of the present and proposed Phase 1 rates is shown as follows in Table 26.

Table 26Comparison of Present and Proposed Phase 1General Service Base Monthly Charge (92-GSBMC)				
Description	Present Rate	Description	Proposed Rate	
Customer Charge		Customer Charge	\$10.00/mo.	
Current Demand Charge	\$6.00/kW	Demand Charge	\$6.00/kW	
Current Energy Charge		Energy Charge		
First 125 kWh/kW	\$0.08670/kWh	First 125 kWh/kW	\$0.08670/kWł	
Next 125 kWh/kW	\$0.07670/kWh	Next 125 kWh/kW	\$0.07670/kWł	
Next 125 kWh/kW	\$0.06670/kWh	Next 125 kWh/kW	\$0.06670/kWł	
Over 375 kWh/kW	\$0.05420/kWh	Over 375 kWh/kW	\$0.05700/kWł	
Base Demand Charge	\$4.00/kW	Base Demand Charge	N.A./kW	
Base Energy Charge	\$0.05800/kWh	Base Energy Charge	N.A./kWh	

To complete the transition, Phase 2 would include increasing the Demand Charge and flattening and increasing the Energy Charge applicable to the first 375 kWh/kW. The incremental increase for Phase 2 is 18.8 percent. A comparison of the present and proposed Phase 2 rates is shown as follows in Table 27.

Table 27Comparison of Present and Proposed Phase 2General Service Base Monthly Charge (92-GSBMC)				
Description	Present Rate	Description	Proposed Rate	
Customer Charge		Customer Charge	\$10.00/mo.	
Current Demand Charge	\$6.00/kW	Demand Charge	\$9.45/kW	
Current Energy Charge		Energy Charge		
First 125 kWh/kW	\$0.08670/kWh	First 375 kWh/kW	\$0.08800/kWh	
Next 125 kWh/kW	\$0.07670/kWh	Over 375 kWh/kW	\$0.05700/kWh	
Next 125 kWh/kW	\$0.06670/kWh			
Over 375 kWh/kW	\$0.05420/kWh			
Base Demand Charge	\$4.00/kW			
Base Energy Charge	\$0.05800/kWh			

## General Service Large TOD (96-GSLTOD)

The COS shows a need to increase the General Service Large TOD (96-GSLTOD) by
\$838,705 or 22.1 percent. In particular, the On-Peak Demand Charge is low compared
to the COS. Wheatland proposes to increase the On-Peak Demand Charge and Energy
Charge to achieve a 24.1 percent increase from this class. A comparison of the present
and proposed rates is shown as follows in Table 28.

Table 28Comparison of Present and ProposedGeneral Service Large TOD (96-GSLTOD)						
Present Proposed						
Description	Rate	Description	Rate			
Monthly kVA Charge		Monthly kVA Charge				
First 100 kVA	\$200.00/mo.	First 100 kVA	\$200.00/mo.			
Excess kVA	\$2.00/kVA	Excess kVA	\$2.00/kVA			
Facilities Charge	various/mo.	Facilities Charge	various/mo.			
On-Peak Demand Charge	\$8.00/kW	On-Peak Demand Charge	\$12.10/kW			
Energy Charge	\$0.04500/kWh	Energy Charge	\$0.05400/kW			

#### **General Service TOD (96-GSTOD)**

The COS shows a need to increase the General Service TOD (96-GSTOD) class by \$626,698 or 25.6 percent. In particular, the On-Peak Demand Charge is low compared to the COS. Wheatland proposes to increase the On-Peak Demand Charge and Energy Charge to achieve a 25.3 percent increase from this class. A comparison of the present and proposed rates is shown as follows in Table 29.

Table 29         Comparison of Present and Proposed         General Service TOD (96-GSTOD)						
PresentProposedDescriptionRateDescription						
Monthly kVA Charge		Monthly kVA Charge				
First 10 kVA	\$20.00/mo.	First 10 kVA	\$20.00/mo.			
Excess kVA	\$2.00/kVA	Excess kVA	\$2.00/kVA			
On-Peak Demand Charge	On-Peak Demand Charge	\$7.80/kW				
On-Peak Demand Charge\$4.00/kWOn-Peak Demand Charge\$7.80/kWEnergy Charge\$0.05800/kWhEnergy Charge\$0.06950/kWh						

#### Irrigation (96-IR)

The COS shows a need to increase the Irrigation (96-IR) class by \$1,655,675 or 50.4 percent. In particular, the Demand Charges are well below the COS results. Because of the magnitude of the needed increase, Wheatland proposes to implement an increase in two phases. Phase 1 will result in a 26.1 percent increase. A comparison of the present and proposed rates for Phase 1 is shown as follows in Table 30.

		Table					
	Con		and Proposed Phase 1				
2	Description	Irrigation (96-IR)PresentPresentDescriptionRateDescription					
3	Customer Charge	\$6.00/mo.	Customer Charge	<b>Rate</b> \$10.00/mo.			
4	Minimum: ≤10 kVA Minimum: >10 kVA	\$12.00/year \$1.00/kVA	Minimum: ≤10 kVA Minimum: >10 kVA	\$20.00/mo. \$1.67/kVA			
5	Demand Charge Irrigation Months (Jul-Sep) Energy Charge	\$6.00/kW	Demand Charge Irrigation Months (Jul-Sep) Energy Charge	\$9.00/kW			
6	Irrigation Months (Jul-Sep) First 125 kWh/kW	\$0.08670/kWh	Irrigation Months (Jul-Sep) First 375 kWh/kW	\$0.08800/kWh			
7	Next 125 kWh/kW Next 125 kWh/kW	\$0.07670/kWh \$0.05420/kWh	Over 375 kWh/kW Other Months	\$0.05700/kWh \$0.07707/kWh			
8	Over 375 kWh/kW Other Months	\$0.05420/kWh \$0.05420/kWh					
9							
0	Phase 2 will include anothe	er increase to the	Summer Demand Charge ir	n accordance			
1	with the COS results and	will result in an	incremental increase of 9.4	percent A			
2	comparison of the present a	nd proposed rates	for Phase 2 is shown as follo	ows in Table			
3	31.						
4	Con	Table nparison of Present Irrigation	and Proposed Phase 2	≝,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
15		Present	(90-1K)				
	Description	Rate	Description	Proposed			
6			Description	Proposed Rate			
- I	Customer Charge	\$6.00/mo.	Customer Charge				
	Minimum: ≤10 kVA	\$6.00/mo. \$12.00/year	Customer Charge Minimum: ≤10 kVA	<b>Rate</b> \$10.00/mo. \$20.00/mo.			
	Minimum: ≤10 kVA Minimum: >10 kVA	\$6.00/mo.	Customer Charge Minimum: <10 kVA Minimum: >10 kVA	<b>Rate</b> \$10.00/mo.			
7	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge	\$6.00/mo. \$12.00/year	Customer Charge Minimum: <10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge	<b>Rate</b> \$10.00/mo. \$20.00/mo.			
.7	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh	Customer Charge Minimum: <10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW	Rate \$10.00/mo. \$20.00/mo. \$1.67/kVA \$16.50/kW \$0.08800/kWh			
17 18 19	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW Next 125 kWh/kW Next 125 kWh/kW	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh	Customer Charge Minimum: <10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep)	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW			
17 18 19 20	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW Next 125 kWh/kW	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh	Customer Charge Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh			
17 18 19 20 21	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW Next 125 kWh/kW Next 125 kWh/kW Over 375 kWh/kW	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh	Customer Charge Minimum: <10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW Other Months	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh			
17 18 19 20 21 22	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW Next 125 kWh/kW Next 125 kWh/kW Over 375 kWh/kW Other Months	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh	Customer Charge Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW Other Months	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh           \$0.07707/kWh			
17 18 19 20 21 22 22 23	Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 125 kWh/kW Next 125 kWh/kW Next 125 kWh/kW Over 375 kWh/kW Other Months Transmission Level Servic	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh	Customer Charge Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW Other Months	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh           \$0.07707/kWh			
117 118 119 220 221 222 223 224 225	Minimum: ≤10 kVAMinimum: >10 kVADemand ChargeIrrigation Months (Jul-Sep)Energy ChargeIrrigation Months (Jul-Sep)First 125 kWh/kWNext 125 kWh/kWNext 125 kWh/kWOver 375 kWh/kWOther MonthsTransmission Level ServiceThe rates for Transmission	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh	Customer Charge Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW Other Months	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh           \$0.07707/kWh			
<ol> <li>117</li> <li>118</li> <li>119</li> <li>200</li> <li>211</li> <li>222</li> <li>223</li> <li>224</li> </ol>	Minimum: ≤10 kVAMinimum: >10 kVADemand ChargeIrrigation Months (Jul-Sep)Energy ChargeIrrigation Months (Jul-Sep)First 125 kWh/kWNext 125 kWh/kWNext 125 kWh/kWOver 375 kWh/kWOther MonthsTransmission Level ServiceThe rates for Transmission	\$6.00/mo. \$12.00/year \$1.00/kVA \$6.00/kW \$0.08670/kWh \$0.07670/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh \$0.05420/kWh	Customer Charge Minimum: ≤10 kVA Minimum: >10 kVA Demand Charge Irrigation Months (Jul-Sep) Energy Charge Irrigation Months (Jul-Sep) First 375 kWh/kW Over 375 kWh/kW Other Months	Rate           \$10.00/mo.           \$20.00/mo.           \$1.67/kVA           \$16.50/kW           \$0.08800/kWh           \$0.05700/kWh           \$0.07707/kWh			

	Testimony of R. J. Macke, page 48
1	wholesale rates and/or ECA. These retail rate schedules were approved by the KCC
2	on August 23, 2007 in Docket 07-WHLE-1117-TAR. Wheatland is not requesting any
3	further changes to these tariffs at this time.
4	
5	Q. Have you prepared various comparisons of the Present and Proposed Rates?
6	A. Yes, I have. Exhibits (RJM-6) and (RJM-7) provide several different comparisons of
7	the present versus proposed rates as follows:
8	Exhibit(RJM-6) - Comparison of Present and Proposed Rate Schedules Exhibit (RJM-7) - Comparison of Monthly Bills
9	Exhibit(RJM-8) - Comparison of Phase 2 Proposed Rates
10	
11	Q. Is Wheatland proposing changes to other charges in addition to the rate schedules
12	identified above?
13	A. No.
14	
15	Q. Have you prepared rate schedules reflecting the proposed changes discussed in your
16	testimony?
17	A. Yes. Exhibit(RJM-9) includes Wheatland's present rate schedules. This exhibit is
18	followed by Exhibit(RJM-10) that includes redline versions of present rate schedules
19	showing all proposed changes, additions and deletions. Finally, Exhibit(RJM-11)
20	presents a "clean" version of proposed rate schedules.
21	
22	Q. Does this conclude your prefiled Direct Testimony?
23	A. Yes, it does.
24	
25	

# STATE OF KANSAS

# BEFORE THE KANSAS CORPORATION COMMISSION

Application for Revised Rates, Tariffs, and Rate Design Changes

of

Wheatland Electric Cooperative, Inc

Docket No. 09-WHLE-\_\_\_\_-RTS

February 27, 2009

#### EXHIBITS OF RICHARD J. MACKE LEADER, RATES AND FINANCIAL PLANNING POWER SYSTEM ENGINEERING, INC.

#### ON BEHALF OF WHEATLAND ELECTRIC COOPERATIVE, INC.

Exhibit	Title
Exhibit(RJM-1)	Curriculum Vitae - Richard J. Macke
Exhibit(RJM-2)	Statement of Operations - Present Rates
Exhibit (RJM-3)	Revenue Requirements
Exhibit (RJM-4)	Cost of Service Analysis
Exhibit(RJM-5)	Statement of Operations - Proposed Rates
Exhibit(RJM-6)	Comparison of Present and Proposed Rate Schedules
Exhibit(RJM-7)	Comparison of Monthly Bills
Exhibit(RJM-8)	Comparison of Phase 2 Proposed Rates
Exhibit(RJM-9)	Present Rate Schedules
Exhibit(RJM-10)	Present Rate Schedules with Redline Proposed Changes
Exhibit (RJM-11)	Proposed Rate Schedules

Exhibit \_\_(RJM-1) Curriculum Vitae -Richard J. Macke

#### SUMMARY OF EXPERIENCE & EXPERTISE

- Over 12 years of experience in electric utility consulting.
- Specialized expertise in financial analyses with particular emphasis on utility finance, rate and cost of service matters, financial planning and financial modeling.

#### **PROFESSIONAL EXPERIENCE**

#### Power System Engineering – Blaine, Minnesota (1999 – Present)

#### Leader, Rates and Financial Planning (April 2008 – Present)

#### Senior Rate and Financial Analyst (2002 – March 2008)

Senior Rate and Financial Analyst in Utility Planning and Rate Division. Responsibilities include providing senior level consulting services to clients in the areas of cost of service, rate design, financial planning and forecasting, merger and acquisition analysis and support. Additional responsibilities include strategic planning, litigation support, regulatory compliance, capital expenditure and operational assessments and advisement.

#### Rate and Financial Analyst (1999 – 2002)

Rate and Financial Analyst in Rates and Financial Planning Division. Emphasis on performing complex financial analyses, such as rate studies consisting of determination of revenue requirements, bundled and unbundled cost of service analysis and rate design. Other responsibilities include performing analysis of special rates and programs, key account analyses, financial forecasting, activity-based costing, policy development and evaluation and other financial analyses for various PSE clients.

#### Energy & Resource Consulting Group, LLC – Denver, Colorado (1998 – 1999)

#### Senior Analyst

Senior Analyst for financial, engineering and management consulting firm. Performed consulting services related to electric, gas and water rate studies. Part of the Financial and Engineering Advisor Team contracted to the City Council of the City of New Orleans, Louisiana to assist in various electric and gas utility matters. Provided expert testimony and participated in various regulatory proceedings involving the City Council, the Public Utilities Commission of Texas and the Public Utilities Commission of Nevada. Provided general financial, management and public policy support to clients.

#### Power System Engineering – Blaine, Minnesota (1996 – 1998)

#### Financial Analyst

Financial Analyst in Utility Planning and Rates Division. Emphasis on retail rate studies, including revenue requirements, and bundled/unbundled cost of service studies. Provide analysis used to support testimony, mergers and acquisitions cases and financial forecasting.

#### Cenerprise, Inc. – Minneapolis, Minnesota (February – May 1996)

#### Energy Sales Analyst Intern for NSP Subsidiary

Performed cost savings analyses for businesses, schools and hospitals. Created training packages for use in other Cenerprise offices consisting of rate tariffs, preliminary consumption analysis, savings analysis, cost projections and financial analysis.

#### EDUCATION

University of Minnesota – Minneapolis, Minnesota, 2007 Master of Business Administration Emphasis: Finance and Strategic Management Bethel University – St. Paul, Minnesota, 1996 Bachelor of Arts Degree in Business Emphasis: Finance and Marketing Minor: Economics

#### **ADDENDUM REFERENCES**

Expert Testimony

Exhibit \_\_(RJM-2) Statement of Operations -Present Rates

# Statement of Operations Present Rates For the Test Year Ended December 31, 2007

(a)	(b)		(c)		(d)		(e)
Line			Actual			F	Pro Forma
No.	Description		Test Year	Ad	ljustments <sup>1</sup>		Test Year
1	Operating Revenue						
2	Sales of Electricity	\$	60,170,208	\$	3,194,363	\$	63,364,571
3	Other		446,181				446,181
4	Total Operating Revenue	\$	60,616,389	\$	3,194,363	\$	63,810,752
5							
6	Operating Expenses						
7	Cost of Purchased Power		41,871,287		6,036,603		47,907,890
8	Transmission - O & M		756				
9	Distribution - Operation		3,251,210		211,632		3,462,842
10	Distribution - Maintenance		2,048,166		127,224		2,175,390
11	Consumer Accounts		1,590,966		95,418		1,686,384
12	Consumer Service & Information		-		3,058		3,058
13	Sales		56,757				56,757
14	Administrative & General		2,986,896		184,321		3,171,217
15	Depreciation & Amortization		4,484,956		318,212		4,803,168
16	Taxes - Property		-				-
17	Taxes - Other		-				-
18	Interest on Long Term Debt		4,938,327		(288,327)		4,650,000
19	Other Interest Expense		934,984		(934,984)		-
20	Other Deductions		294,089				294,089
21	Total Operating Expenses	\$	62,458,394	\$	5,753,157	\$	68,210,795
22							
23	Net Operating Margins	\$	(1,842,005)	\$	(2,558,794)	\$	(4,400,043
24		<u> </u>	(1,0,000)		<u> </u>		
25	Non-Operating Margins						
26	Non-Operating Margins (Interest Income)	\$	1,229,889			\$	1,229,889
27	Income (Loss) from Equity Investments	*	(81,708)				(81,708
28	Non-Operating Margins (Other)		44,367				44,367
29	Generation and Trasmission Capital Credits						-
30	Other Capital Credits & Patronage Dividends		1,016,185				1,016,185
31	Extraordinary Items		-,,				-
32	Total Non-Operating Margins	\$	2,208,733	\$	,,	\$	2,208,733
33	Tomition obstanting tranging						
34	Total Patronage Capital & Margins	ድ	366,728	\$	(2,558,794)	\$	(2,191,310

<sup>1</sup> See Page 2 and 3 for a summary of adjustments and page reference to supporting schedules.

# Supporting Adjustment Schedules Summary of Adjustments

(a)	(b)	(c)
Description	Page	Amounts
I. Revenues		
Schedule A - Adjustment to Revenue	4	\$ 3,194,363
II. Purchased Power		
Schedule B - Purchased Power	11	 6,036,603
III. Distribution - Operations		
Schedule C - Payroll	14	\$ 105,688
Schedule D - Payroll Related Expenses	17	\$ 105,944
		\$ 211,632
IV. Distribution - Maintenance		
Schedule C - Payroll	14	\$ 63,535
Schedule D - Payroll Related Expenses	17	\$ 63,689
······		\$ 127,224
V. Consumer Accounts		
Schedule C - Payroll	14	\$ 47,651
Schedule D - Payroll Related Expenses	17	\$ 47,767
		\$ 95,418
VI. Consumer Service and Sales		
Schedule C - Payroll	14	\$ 1,527
Schedule D - Payroll Related Expenses	17	\$ 1,531
·····		\$ 3,058

Supporting Adjustment Schedul Summary of Adjustments			
(a)	(b)		(c)
Description	Page	A	Amounts
VII. Administrative and General			
Schedule C - Payroll	14	\$	87,05
Schedule D - Payroll Related Expenses	17	\$	87,26
Schedule G - Rate Case Expense	20	\$	10,00
		\$	184,32
VIII. Depreciation			
Schedule E - Depreciation	18	\$	318,21
IX. Interest on Long Term Debt			
Schedule F - Long Term Interest Expense	19	\$	(288,32

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates

#### I. Consumer and Sales Data for December 31, 2007 (As Recorded)

(a) Line	(b)	(c) Avg. No.	(d) Energy	(e) Billing	(f)
No.	Description	Cons. 1	Sales 1	Demand <sup>1</sup>	Revenue <sup>1</sup>
			(kWh)	(kW)	(\$)
1	Residential (88-D)	8,929	86,846,982	N.A.	9,729,140
2	Domestic Base Monthly Charge (88-DBMC)	64	904,194	N.A.	83,964
3	Domestic Cooling & Heating (88-DCH)	179	2,492,097	N.A.	141,724
4	General Service (88-GS)	6,456	103,254,048	473,256.0	11,681,837
5	General Service Cooling & Heating (88-GSCH)	12	452,626	N.A.	24,845
6	General Service Large (88-GSL)	4	3,538,880	11,778.0	352,288
7	Municipal Power Service (88-M)	109	4,487,693	N.A.	436,108
8	Non-Domestic Rural (88-NDR)	412	687,913	N.A.	110,034
9	Private Street & Area Lighting (88-PSL)	76	773,496	N.A.	174,687
10	General Service Large Base Monthly Charge (92-GSLBMC)	4	6,641,220	17,922.0	510,540
11	Large Industrial Interruptible (LG-IND)	1	4,946,052	15,647.0	492,554
12	Public Street Lighting (91-SL)	27	1,473,467	N.A.	168,436
13	Athletic Field Lighting (88-AF)	27	56,142	N.A.	16,000
14	General Service Base Monthly Charge (92-GSBMC)	20	13,764,169	47,381.0	1,063,057
15	General Service Large TOD (96-GSLTOD)	35	41,989,048	103,602.0	3,337,195
16	General Service TOD (96-GSTOD)	239	28,438,911	88,481.0	2,441,998
17	Irrigation (96-IR)	841	38,814,529	50,160.0	3,175,243
18	SP Contract (GC)	1	238,627,170	488,191.0	13,964,226
19	SP Contract (LAKIN)	1	16,100,864	34,944.0	884,213
20	SP Contract (ONEOK)	1	48,612,300	75,759.0	2,203,806
21	SP Contract (IBP)	1	139,157,360	233,539.0	8,717,052
22	SP Contract (CIG)	1	3,773,000	9,600.0	192,212
23	Total <sup>2</sup>	17,249	785,832,161	1,650,260.0	59,901,159
			·	Unbilled Revenue	269,941
				Adj. Total	60,171,100
				Check Total	60,170,208

Difference

892

<sup>1</sup> Figures for calendar 2007 as reported by Wheatland and contained in Workpaper B.

<sup>2</sup> Total number of consumers excludes Domestic and General Service Cooling & Heating.

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates

#### II. Consumer and Sales Data for Pro Forma Test Year

(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Description	Avg. No. Cons.	Energy Sales <sup>2</sup>	Billing Demand	Revenue <sup>3</sup>
110.	Description		(kWh)	(kW)	(\$)
1	Residential (88-D)	8,896	86,528,434	N.A.	9,659,775
2	Domestic Base Monthly Charge (88-DBMC)	64	899,509	N.A.	83,529
3	Domestic Cooling & Heating (88-DCH)	190	2,652,652	N.A.	149,071
4	General Service (88-GS)	6,465	107,154,996	480,089.9	12,016,580
5	General Service Cooling & Heating (88-GSCH)	15	569,739	N.A.	29,428
6	General Service Large (88-GSL)	3	2,654,160	8,833.5	265,348
7	Municipal Power Service (88-M)	112	4,611,207	N.A.	447,512
8	Non-Domestic Rural (88-NDR)	417	696,261	N.A.	111,384
9	Private Street & Area Lighting (88-PSL)	77	783,674	N.A.	172,857
10	General Service Large Base Monthly Charge (92-GSLBMC)	4	6,641,220	17,922.0	510,540
11	Large Industrial Interruptible (LG-IND)	1	4,946,052	15,647.0	495,661
12	Public Street Lighting (91-SL)	27	1,473,467	N.A.	166,826
13	Athletic Field Lighting (88-AF)	26	54,063	N.A.	15,408
14	General Service Base Monthly Charge (92-GSBMC)	20	13,764,169	47,381.0	1,062,829
15	General Service Large TOD (96-GSLTOD)	40	47,873,499	118,121.0	3,803,470
16	General Service TOD (96-GSTOD)	240	28,557,902	88,851.2	2,451,048
17	Irrigation (96-IR)	867	40,014,503	51,710.7	3,281,860
18	Transmission Level Service (25MW)	1	238,627,170	488,191.0	15,770,401
19	SP Contract (LAKIN)	1	16,100,864	34,944.0	888,218
20	Transmission Level Service (5MW)	2	187,769,660	309,298.0	11,982,825
1	Total	17,263	792,373,201	1,660,989.4	63,364,571
					60 170 209
	Historical Revenue			-	60,170,208
	Adjustment				3,194,303
	Moved to Transmission Level Service (25MW)				
	SP Contract (GC)	1	238,627,170	488,191	
	Moved to Transmission Level Service (5MW)				
	SP Contract (ONEOK)	1	48,612,300	75,759	
	× /	-	, ,		

139,157,360

187,769,660

3,773,000

 $\frac{1}{2}$ 

1

233,539

309,298

6,248 (metered)

Moved to 88-GS SP Contract (CIG)

<sup>1</sup> Number of consumers as of December 2007.

<sup>2</sup> Energy sales are based on historical average energy usage per consumer.

<sup>3</sup> See Schedule A, pages 5 - 10.

SP Contract (IBP)

Transmission Service

<sup>4</sup> Total number of consumers excludes Domestic and General Service Cooling & Heating.

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates (Continued)

# II. Estimate of Pro Forma Test Year Revenue Under Present Rates

	Billing			
Rate Class	Determinants	Units	Rate	Revenue
Residential (88-D)				
Customer Charge	8,896	cons.	\$3.80	405,658
Minimum Bill-Town & Village	3,317	chrgs.	\$6.00	19,903
Minimum Bill-Rural				60,428
Other Charges				27,731
Energy Charge	86,528,434	kWh	\$0.10570	9,146,055
Energy Adjustment Charge	86,528,434	kWh		0.000 888
Domestic Base Monthly Charge (88-DBMC)				9,659,775
Customer Charge				29,607
Base Period Energy - Summer	291,965	kWh	\$0.06670	19,474
Base Period Energy - Winter	607,544	kWh	\$0.05670	34,448
Energy Adjustment Charge	899,509	kWh		
Domestic Cooling & Hasting (89 DCH)				83,529
Domestic Cooling & Heating (88-DCH)	100		<b>.</b>	0.100
Customer Charge	190	cons.	\$4.00	9,120
Energy Charge		kWh		
Summer (Jun-Sep)	94,940	kWh	\$0.10570	10,035
Summer LM (Jun-Sep)	407,654	kWh	\$0.05920	24,133
Winter (Oct-May)	2,150,058	kWh	\$0.04920	105,783
Company Learning (99, CS)	2,652,652	kWh		149,071
General Service (88-GS)	5 00 F		<b>\$</b> < <b>\$</b> \$	
Customer Charge	5,037	chrgs.	\$6.00	362,689
Minimum Bill-Town & Village		chrgs.		16,485
Minimum Bill-Rural		chrgs.		319,772
Other Charges	100.000	1	<b>.</b>	104,838
Demand Charge	480,090	kW	\$6.00	2,880,540
Energy Charge	<b>60.01 60.1</b>		<b>*</b> •••• <b>•</b> •• <b>•</b> ••	
First 125 kWh/kW	50,816,244	kWh	\$0.08670	4,405,768
Next 125 kWh/kW	30,738,697	kWh	\$0.07670	2,357,658
Next 125 kWh/kW	14,504,582	kWh	\$0.06670	967,456
Over 375 kWh/kW	11,095,473	kWh	\$0.05420	601,375
General Service Cooling & Heating (88-GSCH)	107,154,996	kWh		12,016,580
Customer Charge	15	conc	\$4.00	720
Energy Charge	15	cons.	\$ <del>4.00</del>	720
Summer (Jun-Sep)	13,148	kWh	\$0.11060	1 151
Summer LM (Jun-Sep)	-			1,454
	137,256	kWh	\$0.05920 \$0.04020	8,126
Winter (Oct-May)	388,795	kWh	\$0.04920	19,129
	569,739	kWh		29,428

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates (Continued)

#### II. Estimate of Pro Forma Test Year Revenue Under Present Rates

	Billing			
Rate Class	Determinants	Units	Rate	Revenue
General Service Large (88-GSL)				
Customer Charge	3	cons.	\$6.00	216
Minimum Bill				
Other Charges				4,511
Demand Charge	8,834	kW	\$12.00	106,002
Energy Charge				
First 125 kWh/kW	1,104,188	kWh	\$0.06170	68,128
Next 125 kWh/kW	1,054,260	kWh	\$0.05670	59,777
Next 125 kWh/kW	465,165	kWh	\$0.05420	25,212
Over 375 kWh/kW	30,548	kWh	\$0.04920	1,503
	2,654,160	kWh		265,348
<u>Municipal Power Service (88-M)</u>				
Customer Charge	112	cons.	\$6.00	8,064
Energy Charge	4,611,207	kWh	\$0.09530	439,448
_				447,512
Non-Domestic Rural (88-NDR)				
Annual Customer Charge	417	cons.	\$45.60	19,015
Annual Minimums				18,774
Energy Charge	696,261	kWh	\$0.10570	73,595
Energy Adjustment Charge		kWh		,
				111,384
<u> Private Street &amp; Area Lighting (88-PSL)</u>				
Metered Lights				
175 W MV	2,070	lights	\$2.18	54,151
250 W MV	166	lights	\$2.45	4,880
400 W MV	61	lights	\$3.27	2,394
Unmetered Lights	783,674	kWh		
175 W MV	763	lights	\$9.54	87,348
250 W MV	79	lights	\$13.43	12,732
400 W MV	40	lights	\$23.65	11,352
	3,179		· · · · ·	172,857
General Service Large Base Monthly Charge (92		0		····,·
Base Monthly Charge				68,309
Base Demand Charge	17,922	kW	\$8.00	143,376
Base Energy Charge	6,641,220	kWh	\$0.04500	298,855
······································	6,641,220	kWh		510,540

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates (Continued)

## II. Estimate of Pro Forma Test Year Revenue Under Present Rates

	Billing			
Rate Class	Determinants	Units	Rate	Revenue
Large Industrial Interruptible (LG-IND)			<u></u>	<u>,</u>
Demand Charge	15,647	kW	\$12.00	187,764
Penalty Demand Charge		kW	\$20.00	
Energy Charge	4,946,052	kWh	\$0.04000	197,842
Fuel Adjustment Clause <sup>1</sup>	4,946,052	kWh	\$0.02225	110,055
Public Street Lighting (91-SL)				495,661
Metered Lights				
Energy Charge	417,551	kWh	\$0.11320	47,267
Unmetered Lights	1,055,916	kWh		
100 W HPS	439	lights	\$4.53	23,864
175 W MV	648	lights	\$7.36	57,231
250 W MV/HPS	149	lights	\$10.98	19,632
400 W MV/MH	77	lights	\$20.38	18,831
	1,313	lights		166,826
Athletic Field Lighting (88-AF)	- ,	8		
Customer Charge	72	chrgs.	\$6.00	433
Minimum Charge		chrgs.	\$0.60	10,376
Energy Charge	45,216	kWh	\$0.10170	4,598
Adjusted for kWh not billed due to minimum.			· · · · ·	15,408
General Service Base Monthly Charge (92-GSBMC)				,
Customer Charge	20	cons.		74,983
Base Demand Charge	47,381	kW	\$4.00	189,524
Base Energy Charge	13,764,169	kWh	\$0.05800	798,322
	, ,			1,062,829
General Service Large TOD (96-GSLTOD)				<i>, ,</i>
Monthly kVA Charge				
First 100 kVA	40	cons.	\$200.00	96,000
Excess kVA	304,097	kVA	\$2.00	608,195
Facilities Charge				,
On-Peak Demand Charge	118,121.0	kW	\$8.00	944,968
Energy Charge	47,873,499	kWh	\$0.04500	2,154,307
				3,803,470

<sup>1</sup> See page 11 for the Energy Cost Adjustment for the Test Year.

### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates (Continued)

### II. Estimate of Pro Forma Test Year Revenue Under Present Rates

	Billing			
Rate Class	Determinants	Units	Rate	Revenue
General Service TOD (96-GSTOD)				
Monthly kVA Charge				
First 10 kVA	240	cons.	\$20.00	57,600
Excess kVA	190,843	kVA	\$2.00	381,685
On-Peak Demand Charge	88,851	kW	\$4.00	355,405
Energy Charge	28,557,902	kWh	\$0.05800	1,656,358
				2,451,048
rrigation (96-IR)				
Customer Charge	4,109	chrgs.	\$6.00	24,655
Facilities Charge				113,641
$Minimum: \le 10 \text{ kVA}$		chrgs.	\$12.00	260,843
Minimum: > 10 kVA		chrgs.	\$1.00	
Demand Charge				
Irrgation Months (Jul-Sep)	51,711	kW	\$6.00	310,264
Other Months		kW		
Energy Charge				
Irrgation Months (Jul-Sep)	26,940,568	kWh		
First 125 kWh/kW	6,332,263	kWh	\$0.08670	549,007
Next 125 kWh/kW	5,904,216	kWh	\$0.07670	452,853
Next 125 kWh/kW	5,202,135	kWh	\$0.06670	346,982
Over 375 kWh/kW	9,501,954	kWh	\$0.05420	515,006
Other Months	13,073,934	kWh	\$0.05420	708,607
	40,014,503	kWh		3,281,860
<u> Fransmission Level Service (25MW)</u>				
Customer Charge	5	del. pts.	\$105.00	6,300
Facility Charge	1	cons.	\$13,563.08	162,757
Demand Charge				
Summer Demand	175,110	kW	\$11.68	2,045,281
Non-Summer Demand	313,081	kW	\$9.34	2,924,180
Transm. Srv. Demand	488,191	kW	\$0.75	366,143
Energy Charge	238,627,170	kWh	\$0.018520	4,419,338
Transm. Srv. Energy	238,627,170	kWh	\$0.002500	596,568
WAPA Allocation	6,574,012	kWh	(\$0.009110)	(59,889
ECA-02 <sup>1</sup>	238,627,170	kWh	\$0.022251	5,309,724
	238,627,170	- kWh		15,770,401

<sup>1</sup> See page 11 for the Energy Cost Adjustment for the Test Year.

#### Schedule A Summary of Consumers, Energy Sales, and Revenue Under Present Rates (Continued)

#### II. Estimate of Pro Forma Test Year Revenue Under Present Rates

	Billing			
Rate Class	Determinants	Units	Rate	Revenue
Contract (Lakin)				
Schedule A (System Energy)				
Customer Charge	1	cons.	\$105.00	1,26
Facility Charge	1	cons.	\$4,761.00	57,13
Demand Charge	19,247	kW	\$11.80	227,11
Energy Charge	6,355,997	kWh	\$0.05182	329,36
				614,87
Schedule B (Firm Energy)				
Demand Charge	15,697	kW		-
Energy Charge	9,744,867	kWh	\$0.01900	185,15
Energy Charge Adjustment	9,744,867	kWh	\$0.00905	88,19
				273,34
				888,21
ansmission Level Service (5MW)				
Customer Charge	4	cons.	\$105.00	5,04
Demand Charge				
Summer Demand	81,318	kW	\$11.68	949,79
Non-Summer Demand	227,980	kW	\$9.34	2,129,33
Transm. Srv. Demand	309,298	kW	\$1.00	309,29
Energy Charge	187,769,660	kWh	\$0.01852	3,477,46
Transm. Srv. Energy	187,769,660	kWh	\$0.00500	938,84
ECA-02 <sup>1</sup>	187,769,660	kWh	\$0.02225	4,178,08
				11,982,82

<sup>1</sup> See page 11 for the Energy Cost Adjustment for the Test Year.

## Schedule B Pro Forma Purchased Power Expense and Adjustment

	Uni	ts	Pro	Forma T	ar	
	Purcha	ased	Rate	1		Amount
Schedule WHM-04						
Meter Charge	28	meters	\$105.00	/mo.	\$	35,280
Demand Charges						
Summer Demand	465,351	kW-mo.	\$11.68	/kW	\$	5,435,298
Non-Summer Demand	977,148	kW-mo.	\$9.34	/kW	\$	9,126,561
					\$	14,561,859
Energy Charge <sup>2</sup>	799,289,759	kWh	\$0.017913	/kWh	\$	14,317,677
Energy WAPA Credit	6,574,012	kWh	-\$0.009110	/kWh	\$	(59,889
ECA-02	799,289,759	kWh	\$0.022251	/kWh	\$	17,785,099
					\$	32,042,887
Property Tax Rider (est.)	799,289,759	kWh	\$0.000607	/kWh	\$	485,043
Subtotal-WHM-04	799,289,759	kWh	\$0.058959	/kWh	\$	47,125,069
<u>Contract: City of Lakin</u>						
Meter Charge	1	meters	\$105.00	/mo	\$	1,260
Demand Charge	1	meters	\$105.00	/110.	Ψ	1,200
Summer Demand	16 000	kW-mo.	\$0.00	/kW/	\$	_
Non-Summer Demand	· · · · ·	kW-mo.	\$11.80		\$	227,150
		kW-mo.	<b>\$11.00</b>			227,150
Energy Charge					Ŷ	
Summer Energy	6,356,257	kWh	\$0.051820	/kWh	\$	329,381
Non-Summer Energy	9,744,462		\$0.028050		\$	273,332
Energy 3-2-1 Credit	16,100,719		-\$0.003000		\$	(48,302)
	, ,				\$	554,411
Subtotal-City of Lakin	16,100,719	kWh	\$0.048620	/kWh	\$	782,821
Total	815,390,478	kWh	\$0.058755	/kWh	\$	47,907,890
	<u></u>	<u></u>		***************************************		
Pro Forma Purchased Powe	er Expense				\$	47,907,890
Pro Forma Adjustment	-				\$	6,036,603
Historical Test Year Purcha	sed Power Ex	nense			\$	41,871,287

<sup>1</sup> Sunflower Electric Power Cooperative rates for 2009.

<sup>2</sup> Energy sales plus losses.

# Schedule C Adjustment to Payroll Expense

<u>I. Adjus</u>	tments to Union Payroll Expense		
<u>A.</u>	Actual wages recorded during the test year.		
	1. From January 1, 2007 to November 30, 2007 payroll	\$	2,865,977
	2. From December 1, 2007 to December 31, 2007 payroll	\$	270,965
		\$	3,136,942
<u>B.</u>	Adjustments to annualize December 1, 2007 payroll increase.		
	1. Test Year payroll prior to increase	\$2,865,977	
	2. Percent increase	4.00%	
	3. Increase	\$	114,639
	Subtotal	\$	3,251,581
<u>C.</u>	Adjustments to annualize December 1, 2008 payroll increase.		
	1. Adjusted 2007 payroll	\$3,251,581	
	2. Percent increase	3.00%	
	3. Increase	\$	97,547
D.	Total Pro Forma Test Year Payroll Increase - Union		
	1. Pro Forma Test Year Payroll - Union	\$	3,349,129
	2. Less: Test Year Payroll - Union	\$	2,865,977
	3. Total Payroll Increase - Union	\$	483,152
<u>II. Adju</u> <u>A.</u>	<ul> <li>stment to Non-Union Payroll Expense</li> <li><u>Actual wages recorded during the test year.</u></li> <li>1. From January 1, 2007 to November 30, 2007 payroll</li> </ul>	\$	1,228,275
	<ol> <li>From December 1, 2007 to December 30, 2007 payroll</li> <li>From December 1, 2007 to December 31, 2007 payroll</li> </ol>	\$	116,128
	2. From December 1, 2007 to December 31, 2007 payton		1,344,403
<u>B.</u>	Adjustments to annualize December 1, 2007 payroll increase.		
	1. Test Year payroll prior to increase	\$1,228,275	
	2. Percent increase	3.00%	
	3. Increase	\$	36,848
	Subtotal	\$	1,381,251
<u>C.</u>	Adjustments to annualize December 1, 2008 payroll increase.		
	1. Adjusted 2007 payroll	\$1,381,251	
	2. Percent increase	3.00%	
	3. Increase	\$	41,438
<u>D.</u>	Total Pro Forma Test Year Payroll Increase - Non-Union		
	1. Pro Forma Test Year Payroll - Non-Union	\$	1,422,689
	2. Less: Test Year Payroll - Non-Union	\$	1,228,275
	3. Total Payroll Increase - Non-Union	\$	194,414

## Schedule C Adjustment to Payroll Expense (Continued)

# III. Adjustment to Payroll Expense to Reflect Staffing Changes A. New Employees Added During the Test Year

Union			No	ormalized		
Employees	Actual Wages			Wages		djustment
Employee A	\$	28,388	\$	39,135	\$	10,747
Employee E	\$	34,440	\$	43,072	\$	8,632
Employee F	\$	17,507	\$	23,747	\$	6,240
Employee G	\$	9,815	\$	34,775	\$	24,960
Employee H	\$	8,593	\$	31,994	\$	23,401
Total	\$	98,743	\$	172,723	\$	73,980

Non-Union			No	ormalized				
Employees	Actual Wages		Actual Wages Wages		tual Wages Wages		A	djustment
Employee B	\$	14,786	\$	27,786	\$	13,000		
Employee C	\$	13,556	\$	28,117	\$	14,561		
Employee D	\$	40,950	\$	43,596	\$	2,646		
Total	\$	69,292	\$	99,499	\$	30,207		

# B. Employees Leaving During the Test Year

			Union		
		En	nployees	Ac	tual Wages
Employee A	\$ 31,790	\$	60,869	\$	(60,869)
Employee B	\$ 19,403	\$	38,976	\$	(38,976)
Employee E	\$ 93,852	\$	93,852	\$	(93,852)
Employee F	\$ 86,225	\$	86,225	\$	(86,225)
			Total	\$	(279,922)

		No	n-Union	······	
		Employees		Ac	tual Wages
Employee C	\$ 20,100	\$	24,260	\$	(24,260)
Employee D	\$ 29,784	\$	77,334	\$	(77,334)
			Total	\$	(101,594)

# C. Employees Hired or Scheduled to be Hired During the Pro Forma Test Year

Non-Union Employees	Starting Date	Actual Wages	Source
Employee A	1/2/08	\$ 27,000	
Total		\$ 27,000	

# Schedule C Adjustment to Payroll Expense (Continued)

### IV. Summary

		Union	Non-Union	•	Total
1. Wages booked in Test Year	\$	3,136,942	\$1,344,403	\$	4,481,345
2. Adjustments (Schedule C, Parts I, II, and III)					
Test Year Changes					
a. Increase in Wages	\$	483,152	\$ 194,414	\$	677,565
b. New or Re-assigned Employees	\$	73,980	\$ 30,207	\$	104,187
c. Retired or Re-assigned Employees	\$	(279,922)	\$ (101,594)	\$	(381,516)
d. Pro Forma New Employee			\$ 27,000	\$	27,000
Total Adjustments	\$	277,210	\$ 150,027	\$	427,236
3. Total Pro Forma Test Year Payroll	_\$	3,414,152	\$1,494,430	\$	4,908,581

# V. Allocation of Payroll Adjustment to Expense Categories

		Payroll			
	F	Recorded in	Allocation		
Category		Test Year	Factor	Adjustment	
Transmission	\$	-	0.00%	\$	-
Distribution Operations	\$	1,108,576	24.74%	\$	105,688
Distribution Maintenance	\$	666,428	14.87%	\$	63,535
Consumer Accounts	\$	499,821	11.15%	\$	47,651
Consumer Service	\$	16,020	0.36%	\$	1,527
Sales Expense	\$	-	0.00%	\$	-
Admin. and General	\$	913,134	20.38%	\$	87,055
Regulatory Expense	\$	-	0.00%	\$	-
Sub-to	otal \$	3,203,979	71.50%	\$	305,457
Other	\$	1,277,366	28.50%	\$	121,780
Total	\$	4,481,345	100.00%	\$	427,236

### Schedule D Adjustment to Payroll Related Expenses

			Union	lon-Union	Total
	hange in Payroll per Schedule C	\$	277,210	\$ 150,027	\$ 427,236
	g Term Disability				
1.	Adjustment due to increase in payroll				
	a. Rate		0.00%	 0.00%	 0.00%
	b. Adjustment	\$		\$ -	\$ 
2.	Adjustment due to increase in rate				
	a. Total pro forma payroll	\$ 3	3,414,152	\$ 1,494,430	\$ 4,908,581
	b. Change in rate		0.00%	0.00%	0.00%
	c. Adjustment	\$	-	\$ -	\$ -
3.	Subtotal Long Term Disability	\$	-	\$ 	\$ 
<u>B. FICA</u>	A				
<u>D.1107</u> 1.	Adjustment due to increase in payroll				
	a. Rate		7.65%	7.65%	7.65%
	b. Adjustment	\$	21,207	\$ 11,477	\$ 32,684
2.	Adjustment due to increase in rate				
	a. Total pro forma payroll	\$ 3	,414,152	\$ 1,494,430	\$ 4,908,581
	b. Change in rate		0.00%	0.00%	0.00%
	c. Adjustment	\$	•••	\$ -	\$ 
3.	Subtotal FICA	\$	21,207	\$ 11,477	\$ 32,684
	<u>kmen's Compensation</u>				
1.	Adjustment due to increase in payroll		4 600/	4 (00)	4 (00)
	a. Rate		4.68%	 4.68%	 4.68%
	b. Adjustment		12,973	\$ 7,021	\$ 19,995
2.	Adjustment due to increase in rate				
	a. Total pro forma payroll	\$ 3	,414,152	\$ 1,494,430	\$ 4,908,581
	b. Change in rate		0.14%	 0.14%	 0.14%
	c. Adjustment		4,780	\$ 2,092	\$ 6,872
3.	Subtotal Workmen's Compensation		17,753	\$ 9,113	\$ 26,867

## Schedule D Adjustment to Payroll Related Expenses

			Union	N	Ion-Union		Total
-	bitalization Expense						
1.	Adjustment due to increase in payroll a. Rate		25 700/		25.70%		25 709/
	a. Rate b. Adjustment		25.70%	\$		\$	25.70%
	b. Adjustment	<u> </u>	71,243	•	38,557	Э	109,800
2.	Adjustment due to increase in rate						
	a. Total pro forma payroll	\$	3,414,152	\$	1,494,430	\$	4,908,581
	b. Change in rate		-0.10%		-0.10%		-0.10%
	c. Adjustment		(3,414)	\$	(1,494)	\$	(4,909)
3.	Subtotal Hospitalization Expense		67,829	\$	37,062	\$	104,891
E. Life	Insurance						
1.	Adjustment due to increase in payroll						
	a. Rate		0.80%		0.80%		0.80%
	b. Adjustment	\$	2,218	\$	1,200	\$	3,418
2.	Adjustment due to increase in rate						
	a. Total pro forma payroll	\$	3,414,152	\$	1,494,430	\$	4,908,581
	b. Change in rate	*	-0.10%	•	-0.10%	+	-0.10%
	c. Adjustment	\$	(3,414)	\$	(1,494)	\$	(4,909)
3.	Subtotal Life Insurance Expense		(1,196)	\$	(294)	\$	(1,491)
F. State	and Federal Unemployment						
1.	Adjustment due to increase in payroll						
	a. Rate		0.00%		0.00%		0.00%
	b. Adjustment	\$	-	\$		\$	
2.	Adjustment due to increase in rate						
2.	a. Total pro forma payroll	\$	277,210	\$	150,027	\$	427,236
	b. Change in rate	Ψ	0.00%	Ψ	0.00%	Ψ	0.00%
	c. Adjustment	\$	~	\$	-	\$	-
3.	Subtotal Unemployment	\$	-	\$	-	\$	-
a n d							<u></u>
G. Retir	ement and Pension						
	1. Adjustment due to increase in payroll		21.200/		21.200/		21.200/
	a. Rate	¢	21.20%	¢	21.20%	ው	21.20%
	b. Adjustment		58,768	\$	31,806	\$	90,574
	2. Adjustment due to increase in rate						
	a. Total pro forma payroll	\$ 3	3,414,152	\$	1,494,430	\$	4,908,581
	b. Change in rate		3.46%		3.46%		3.46%
	c. Adjustment		118,130	\$	51,707	\$	169,837
	3. Subtotal Retirement and Pension	\$	176,898	\$	83,513	\$	260,411

### Schedule D Adjustment to Payroll Related Expenses

		Union	N	on-Union	Total
H. Accie	dent Insurance				
	1. Adjustment due to increase in payroll				
	a. Rate	 0.00%		0.00%	0.00%
	b. Adjustment	\$ -	\$	-	\$ 
I. Summ	lary				
1.	Long Term Disability	\$ -	\$	-	\$ -
2.	Workmen's Compensation	\$ 17,753	\$	9,113	\$ 26,867
3.	Hospitalization Insurance Expense	\$ 67,829	\$	37,062	\$ 104,891
4.	Life Insurance	\$ 2,218	\$	1,200	\$ 3,418
5.	State and Federal Unemployment	\$ -	\$	-	\$ -
6.	Retirement and Pension	\$ 176,898	\$	83,513	\$ 260,411
7.	Accident Insurance	\$ -	\$	-	\$ -
8.	Sub-Total	\$ 264,698	\$	130,889	\$ 395,587
9.	FICA	\$ 21,207	\$	11,477	\$ 32,684
10.	Total	\$ 285,904	\$	142,366	\$ 428,270

### J. Allocation Payroll Related Expense Adjustments to Expense Categories

	Payroll			
	Recorded in	Allocation		
Category	Test Year	Factor	A	djustment
Generation	\$ -	0.00%	\$	-
Transmission	-	0.00%	\$	-
Distribution Operations	1,108,576	24.74%	\$	105,944
Distribution Maintenance	666,428	14.87%	\$	63,689
Consumer Accounts	499,821	11.15%	\$	47,767
Consumer Service	16,020	0.36%	\$	1,531
Sales Expense	-	0.00%	\$	-
Admin. and General	913,134	20.38%	\$	87,266
Regulatory Expense	-	0.00%	\$	-
Sub-total	\$ 3,203,979	71.50%	\$	306,196
Other	1,277,366	28.50%	\$	122,074
Total	\$ 4,481,345	100.00%	\$	428,270

# Schedule E Adjustment to Depreciation Expense

A. Depreciation on Existing Plant	
1. Depreciation Expense Recorded on December 31, 2007	\$380,764
2. Multiply by 12 Months	12
3. Normalized Depreciation Expense on Existing Plant	\$4,569,168

# B. Depreciation on New Plant to be Added During Pro Forma Test Year

				Annual
		Depreciation	De	epreciation
Description of Plant	Amount	Rate		Expense
Distribution Plant	\$ 7,800,000	3.000%	\$	234,000
Transmission Plant	\$-	0.000%	\$	-
General Plant	\$-	0.000%	\$	-
Depreciation Expense - New Plant			\$	234,000
C. Summary				
1. Total Depreciation Expense for the Pro Forma	Test Year		\$	4,803,168
2. Less: Actual Depreciation Expense for the Tes	t Year		\$	4,484,956
3. Adjustment to Depreciation Expense			\$	318,212

### Schedule F Adjustment to Long Term Interest Expense

# A. Interest on Existing Loans

<ol> <li>Interest Expense for the Period Ending December 31, 2007</li> <li>Less Interest Expense on non-electric debt.</li> <li>Adjusted Interest Expense on Existing Loans</li> </ol>	\$ 4,938,327 638,327 4,300,000
B. Interest on New Loans	
<ol> <li>Estimated New Loans to be Requisitioned during 2008</li> <li>Composite Interest Rate (See Section D., Below)</li> <li>Estimated Interest Expense on New Loan Funds</li> </ol>	\$ 7,000,000 5.00% 350,000
<u>C. Summary</u>	
1. Interest Expense for the Pro Forma Test Year	
a. Interest on Existing Debt	\$ 4,300,000
b. Interest on New Debt	\$ 350,000
c. Total	\$ 4,650,000
2. Interest Expense for the Test Year	\$ 4,938,327
3. Adjustment to Interest on Long Term Debt	\$ (288,327)

#### Schedule F Adjustment to Long Term Interest Expense (Cont'd)

### D. Calculation of Composite Interest Rate on New Loan Funds

		Percent of		Weighted
	Amount	Loan Funds	Interest Rate	Interest Rate
RUS	\$ -	0.0%		0.00%
CFC	7,000,000	100.0%	5.0%	5.00%
Total	\$ 7,000,000	100.0%	5.0%	5.00%

#### Schedule G Adjustment for Rate Case Expense

A. Adjustment for Rate Case Expense	
1. Estimated Rate Case Expense	\$ 30,000
2. Amortize Over 3 Years	 3
3. Adjustment to A&G for Estimated Rate Case Expense	\$ 10,000