

1 DEPARTMENT OF PUBLIC SERVICE REGULATION  
2 BEFORE THE PUBLIC SERVICE COMMISSION  
3 OF THE STATE OF MONTANA

\*\*\*\*\*

IN THE MATTER OF THE PETITION OF JAMES T. )  
AND ELIZABETH A. GRUBA; LEO G. AND JEANNE )  
R. BARSANTI ON BEHALF OF THEMSELVES & ) REGULATORY DIVISION  
OTHERS SIMILARLY SITUATED, )  
Complainants. )  
VS. )  
DOCKET NO. D2010.2.14 )  
NORTHWESTERN ENERGY, )  
Defendant.

4 \_\_\_\_\_  
5 PRE-FILED WRITTEN DIRECT TESTIMONY OF COMPLAINANTS' WITNESS, JAMES T. GRUBA  
6 ~~Pre-filed March 21, 2014~~

7  
8 **Q. Please raise your right hand. Do you solemnly swear or affirm that the written**  
9 **testimony below and any written or oral testimony or responses to data requests following**  
10 **it will be the truth the whole truth and nothing but the truth, so help you God?**

11 A. I do.

12 **Attorney: You will be under oath during this entire proceeding.**

13 **[Proof of Complaint ¶¶ 5 – 7.]**

14 **Q. Please state your name and address.**

15 A. I am James T. Gruba. Since 1995, I have lived with my wife, Elizabeth (Beth) A.  
16 Gruba at 2527 Wyoming Ave, Billings, Montana 59102.

17 **Q. Are you and Elizabeth complainants in this proceeding?**

18 A. Yes.

19 **Q. Please tell us about your education and occupation?**

20 A. I graduated from high school in Miles City and have a Bachelor's degree from MSU-B  
21 in environmental studies. I currently work in the meat department at the Billings COSTCO store.

1 **Q. Please tell us about your wife's education and occupation?**

2 Q. Elizabeth graduated from high school in Miles City and has a nursing degree from  
3 Miles City Community College (MCC). She currently is employed by Billings Clinic.

4 **Q. Do you own the property where you live and pay property taxes on that**  
5 **property?**

6 A. Yes, we own and live at 2527 Wyoming Ave, and pay taxes on that property.

7 **Q. Who supplies you with electricity?**

8 A. NorthWestern has admitted that our electric service comes from Northwestern Energy  
9 in Billings, Montana. [See C-002, RFA 2]

10 **Q. Do you live in a Special Improvement Lighting & Maintenance District,**  
11 **sometimes known as a SILMD?**

12 A. Yes, there are two SILMDs where we live, # 161 & # 162. Number 161 is called the  
13 Yellowstone & Wyoming SILMD. Number 162 is the Yellowstone & Wyoming Alley SILMD.  
14 NorthWestern acknowledges that the Yellowstone County web site indicates Elizabeth and I are  
15 the owners at 2527 Wyoming Avenue and that that address is in SILMD # 161 & 162. NWE says  
16 it can't confirm the accuracy of the web site or its data because of a disclaimer on the site. [See  
17 C-003, RFA 3]. I can confirm that we live in SILMD # 161 & 162. It's on the bills we pay.

18 **Q. I noticed that the Complaint I filed in this proceeding referred to SILMDs 161**  
19 **and 162 incorrectly as 261 and 262 but that the names of the SILMDs were correct. You**  
20 **just mentioned that you live in 161 and 162. Should the pleadings be corrected to reflect**  
21 **your answer?**

1 A. Yes, any complaint reference to SILMD 261 when addressing property at 2527  
2 Wyoming Ave should be changed to # 161. And any complaint reference to SILMD 262 when  
3 referencing property at 2527 Wyoming Ave should be changed to # 162.

4 ~~ATTORNEY MOTION: We move pursuant to M.R.Civ.P. 15(a)(2) and (b)(1) to~~  
5 ~~have the pleadings herein amended to reflect and conform to the testimony just given with~~  
6 ~~regard to the corrected reference to SILMDs 161 & 162 and ask that the other parties in~~  
7 ~~the proceeding consent to the amendment.~~

8 [Proof of Complaint ¶ 16.]

9 **Q. Did you file this proceeding to help others?**

10 A. Yes, especially to bring about the adoption of energy-efficient, environmentally  
11 sustainable street lighting technologies.

12 [Proof of Complaint ¶¶ 86 – 88]

13 **Q. Have you had an opportunity to view Complainants' Exhibit 1, which is posted**  
14 **online on the PSC web site at**

15 [http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2010214\\_IN\\_20140207\\_Exhibit1N](http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2010214_IN_20140207_Exhibit1N)  
16 [WE.PDF](#) ?

17 A. Yes.

18 **Q. Calling your attention to pages 373 and 378 of Complainants' Exhibit 1, please**  
19 **tell us the original date of the contract between the City of Billings and Montana Power**  
20 **(NorthWestern Energy's predecessor) for street lighting service to SILMDs # 161 and 162?**

21 A. November 23, 1970.

22 **Q. Do you know whether or not property taxpayers in SILMDs # 161 and 162**  
23 **(where you own property) began to receive electric service pursuant to a November 23,**

1 **1970, contract the City of Billings had with Montana Power and any extensions of that**  
2 **contract with Montana Power or Defendant?**

3 A. I assume that property owners in SILMDs 161 and 162 began to receive electric  
4 service pursuant to the November 23, 1970, contract found in Complainants' Exhibit 1 because  
5 that is the only contract that was made available to the city by the utility. We will be asking  
6 NorthWestern to admit service was provided under that contract in our next round of discovery  
7 (C-051 RFA 30) or to indicate why it cannot admit that.

8 **Q. Are you directly affected by the rates set forth pursuant to the PSC tariff and its**  
9 **revisions adopted in section 5 of the aforementioned November 23, 1970, contract and its**  
10 **extensions?**

11 A. Yes, the Montana Supreme Court said persons living in SILMDs like Beth and me are  
12 directly affected by such contracts.

13 **[Proof of Complaint ¶ 89]**

14 **Q. Based on these Exhibit 1 contracts, who do you task with looking after the**  
15 **interests of tax and rate payers in SILMDs 161 and 162 and other lighting districts?**

16 A. The PSC and the City of Billings and other Montana cities. As fiduciaries and officials  
17 charged with understanding utility rates, they should be guardians of the public interest,  
18 protecting us to insure utility rates are not excessive.

19 **[Proof of Complaint ¶¶ 90 & 91]**

20 **Q. What kind of lights were originally installed in SILMDs 161 and 162?**

21 A. Section 2 of the November 23, 1970, contracts say 175 watt mercury vapor lights were to be  
22 installed, 45 post top lights in SILMD # 161 and 7 lights in SILMD # 162. The contract does not  
23 say whether or not the SILMD 162 lights are post top and it is reasonable to believe they were

1 not because they are mounted too high (i.e., on 25 foot poles not normally used for post top  
2 lighting). Section 5 of the 1970 contract set the rate for 45, 175 watt mercury vapor units at \$4.91  
3 per unit/month. The rate under the same tariff for the lights in our alley (SILMD # 162) was  
4 \$2.39 per unit/month. I'm assuming that both charges included energy supply, operation, and  
5 maintenance. Perhaps the reason for the difference in the rate in our two SILMDs was the  
6 difference in cost of the 25 foot wooden poles and overhead wiring that apparently already were  
7 in existence in our alley, while the 17 foot steel poles with post top lights to be served by  
8 underground wiring in our street were likely new.

9 **[Proof of Complaint ¶¶ 92 - 94]**

10 **Q. Do you know when the lights in SILMDs 161 and 162 were converted to high**  
11 **pressure sodium lights?**

12 A. Not exactly. However, footnote 1 of Mr. Barsanti's testimony quotes the 1982 PSC  
13 Order No. 4938a. It allowed Montana Power 7 years to complete the transition to HPS street  
14 lights. So the conversion likely would have taken place sometime between 1982 and 1990. At the  
15 latest, the HPS lights in SILMD # 161 and 162 would have been operational by 1/1/1990 unless  
16 the utility violated the Commission's order or sought relief from it.

17 ~~**Attorney Clarification: Your honors, as part of Mr. Barsanti's testimony, we have**~~  
18 ~~**asked the PSC to take administrative notice of its Order No. 4938a. NorthWestern would**~~  
19 ~~**be hard pressed to deny that quotation since it averred in answer to our Complaint**~~  
20 ~~**paragraph 92 that the order speaks for itself.**~~

21 **[Proof of Complaint ¶¶ 62 – 63]**

22 **Q. From Complainants' Exhibit 8 found on the PSC web site at**

23 **[http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2010214\\_IN20140207\\_ComptsExhi](http://psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2010214_IN20140207_ComptsExhi)**

1 [bit8.pdf](#) , page 108, do you know how many street lights owned by NorthWestern Energy  
2 there are now in SILMD 161 and the type of technology the street lights utilize?

3 A. In June of 2009, there were 45, 100 watt post top high pressure sodium (HPS) street  
4 lights in Billings SILMD # 161, all owned by NorthWestern Energy. I assumed they were HPS  
5 because all of the mercury vapor lights were supposed to be changed out in the 1980s. One can  
6 tell we are being billed for 100 watt lights because of the energy charge that is being applied to  
7 each light, namely for 41 kWh/month usage, which is the usage assigned to 100 watt HPS lights.

8 **Q. From Complainants' Exhibit 8, page 110, can we tell how many street lights**  
9 **owned by NorthWestern Energy there are in SILMD 162 and what type of technology**  
10 **those street lights utilize?**

11 A. In June of 2009, there were 7, 100 watt cobra head high pressure sodium street lights  
12 in Billings SILMD # 162, all owned by NorthWestern Energy.

13 **Q. In the Complaint, did I mis-state the number of lights in each of these SILMDs?**

14 A. Yes. In the complaint, you apparently were referencing the numbers of lights in  
15 SILMDS 261 and 262 rather than the correct numbers for 161 and 162. The numbers I have just  
16 given are correct for SILMDs 161 and 162.

17 **[Proof of Complaint ¶¶ 70, 71 & 112]**

18 **Q. From Complainants' Exhibit 8, page 108, can we tell what the monthly**  
19 **ownership charge was in June of 2009 that NorthWestern Energy billed Billings for street**  
20 **light service to SILMD # 161?**

21 A. \$707.40 (of the overall \$913.60 amount) was for the LS ownership charge. The overall  
22 \$913.60 amount is found on page 107.

23 **Q. What percent of the total \$913.60 bill was the \$707.40 ownership charge?**

1           A. Approximately 77.4% of the charge assessed to SILMD # 161 property owners was  
2 for the ownership charge.

3           **Q. Can we tell from Complainants' Exhibit 8, page 108 what the monthly ownership**  
4 **charge was in June of 2009 for each lighting unit in SILMD # 161?**

5           A. Yes, \$15.72 cents a month.

6           **Q. Can we tell from the \$15.72 cents a month which ownership category the SILMD**  
7 **# 161 street lights were in?**

8           A. Yes. Please look at Complainants' Exhibit 2, in Mr. Barsanti's testimony which I'm  
9 inserting here for convenience. You will note in Column D that the \$15.72 monthly ownership  
10 charge appears for the 2009 bill. Moving to the left on that same line (row 6) we see in columns  
11 A & B that the \$15.72 is assessed for lights originally costing between \$1,200 and \$1,399 per  
12 lighting unit.

13           **Q. Why was 11.65% used as the rate of return in Complainants' Exhibit 2?**

14           A. As explained by Mr. Barsanti, NorthWestern admitted that since 7/30/1984, neither  
15 NorthWestern nor its predecessor has been allowed to earn an overall rate of return in excess of  
16 11.65%.

17           ~~**ATTORNEY CLARIFICATION & MOTION: On January 27, 2014, we asked**~~  
18 ~~**NorthWestern to admit that Complainants' Exhibit 2 calculations are correct. (C-016, RFA**~~  
19 ~~**16 through C-022, RFA 22) NorthWestern admitted the cost ranges of columns A & B and**~~  
20 ~~**corrected one cell in column D (which we have also corrected). The correction does not**~~  
21 ~~**affect our Billings calculations. [See C-016, RFA 16]**~~

22           ~~**NWE declined to verify or dispute the accuracy of the amortization calculations in**~~

**COMPLAINANTS' EXHIBIT 2 (Barsanti & C-016, RFA 16 through C-022, RFA 22)**

**NUMBER OF YEARS NEEDED TO AMORTIZE A LOAN OF THE AMOUNTS AT EACH END OF THE OWNERSHIP CHARGE RANGES**

**Excel Amortization Formula Used:**

**(for Col. E, row 1) =NPER(11.65%/12,-\$D1,\$A1,0)/12; (for Col. F, row 3) =NPER(11.65%/12,-\$D3,\$B3,0)/12\***

**(for Col. G, row 1) =NPER(9.09%/12,-\$D1,\$A1,0)/12; (for Col. H, row 1) =NPER(9.09%/12,-\$D1,\$B1,0)/12**

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	
			June 2009 Tariff Unit Rate Per Month	Number of years to amortize a loan of the amount in the (bottom of range) row indicated, Col. A, at 11.65% Rate of Return if the monthly Ownership Charge in Col. D was made as payment	Number of years to amortize a loan of the amount in <b>(top of range)</b> rows 1 & 2, Col. C and rows 3 - 14, Col. B, at 11.65% Rate of Return if the monthly Ownership Charge in Col. D was made as payment	Number of years to amortize a loan of the amount in the (bottom of range) row indicated, Col. A, at 9.09% Rate of Return if the monthly Ownership Charge in Col. D was made as payment	Number of years to amortize a loan of the amount in the <b>(top of range)</b> row indicated, Col. B, at 9.09% Rate of Return if the monthly Ownership Charge in Col. D was made as payment	
	Ownership Charge Cost Range							
	Bottom	Top	Modified Top*					
<b>1</b>	\$ 200	\$ 399	\$ 270	\$ 2.70	10.95	30.49	9.09	33.98
<b>2</b>	\$ 400	\$ 599	\$ 594	\$ 5.77	9.64	32.13	8.22	17.05
<b>3</b>	\$ 600	\$ 799		\$ 8.97	9.04	17.26	7.80	12.40
<b>4</b>	\$ 800	\$ 999		\$ 10.77	11.01	19.91	9.13	13.39
<b>5</b>	\$ 1,000	\$1,199		\$ 12.95	11.95	19.76	9.71	13.34
<b>6</b>	\$ 1,200	\$1,399		\$ 15.72	11.66	17.21	9.53	12.38
<b>7</b>	\$ 1,400	\$1,599		\$ 19.17	10.65	14.31	8.90	11.03
<b>8</b>	\$ 1,600	\$1,799		\$ 21.58	10.97	14.29	9.11	11.02
<b>9</b>	\$ 1,800	\$1,999		\$ 24.32	10.93	13.80	9.08	10.76
<b>10</b>	\$ 2,000	\$2,199		\$ 26.04	11.81	14.78	9.63	11.27
<b>11</b>	\$ 2,200	\$2,399		\$ 28.53	12.09	14.89	9.80	11.33
<b>12</b>	\$ 2,400	\$2,599		\$ 30.99	12.02	14.52	9.76	11.14
<b>13</b>	\$ 2,600	\$2,799		\$ 33.47	12.10	14.41	9.80	11.08
<b>14</b>	\$ 2,800	\$2,999		\$ 35.97	12.16	14.30	9.84	11.03

\* The top of range does not amortize at the monthly rate specified in the first two rows, so the top range was lowered to the amounts in Col. C for the Column F calculation in rows 1 & 2 and to \$340 for the Col. H calculation in row 1. Average original costs below the original or modified tops will amortize in fewer years than shown. The amortization formula for Col. F, row 1 =NPER(11.65%/12,-\$D1,\$C1,0)/12

1 ~~Complainants' Exhibit 2. Instead NWE objected to the calculations as irrelevant claiming~~  
2 ~~the docket as limited does not have anything to do with a loan or amortization of a loan.~~  
3 ~~[See C-017, RFA 17 through C-022, RFA 22]. The amortization tables would be how one~~  
4 ~~would depreciate a properly constructed rate base with proper amortization rates. We~~  
5 ~~have used the rates most favorable to NWE in constructing our claim that NWE is~~  
6 ~~overcharging. NWE also refused to construct for the ranges it admitted were correct on the~~  
7 ~~ELDS-1 tariff, its own amortization table. [See C-038, I 11] Such a table would indicate~~  
8 ~~when the amounts collected by the tariff would completely cover the cost of the street lights~~  
9 ~~assigned to a range of revenue collection in the tariff.~~

10 ~~Since NWE's refuses to admit these requests or to dispute the accuracy of the~~  
11 ~~calculations, or to construct its own amortization table/depreciation schedule, we have~~  
12 ~~proved a *prima facie* case with regard to the use of Complainants' Exhibit 2. We therefore~~  
13 ~~move (if it has not already been done in conjunction with Mr. Barsanti's testimony) the~~  
14 ~~Commission to take administrative notice of the mathematical facts in Exhibit2, namely~~  
15 ~~that the math done for the calculations in Exhibit 2 is correct. We will now demonstrate~~  
16 ~~how Complainant's Exhibit 2 relates to the alleged overcharge issue.~~

17 **Q. Can you tell from Complainants' Exhibit 2 how long it would have taken to pay**  
18 **for street lighting units costing \$1,399 a unit if payments of \$15.72 were made to cover the**  
19 **cost of the units plus an interest rate of 11.65% on the original investment?**

20 A. Yes. 17.21 years. That's in Column F, row 6.

21 **Q. Have you seen Complainants' Exhibit 10, line 41?**

22 A. Yes. That is the line where information concerning our SILMD # 161 appears.

23 **[Proof of Complaint ¶¶ 95, 96]**

1           **Q. Assuming NorthWestern was allowed to earn an 11.65% overall rate of return on**  
2 **an investment in SILMD # 161 lights of no more than \$1,399 per lighting unit, when would**  
3 **those lights have been completely paid for with 11.65% interest if the charges for the high**  
4 **pressure sodium conversion began no later than 1/1/1990 and the monthly payment was**  
5 **\$15.72?**

6           A. Using the assumptions you have stated, around March 13, 2007.

7           **[Proof of Complaint ¶¶ 97 & 117 - 119]**

8           **Q. What do you believe should happen once the SILMD # 161 and # 162 lights have**  
9 **been paid for?**

10          A. The ownership charge NorthWestern (and its predecessor Montana Power) are  
11 imposing to defray the cost of the lighting infrastructure, should have ceased. That is the  
12 ownership charge should have ceased for taxpayers in SILMD # 161 around March 13, 2007.  
13 Other testimony in this proceeding establishes that the ownership charge did not cease because  
14 the utilities have depreciated the street lighting infrastructure over a much longer period than it  
15 takes for the tariff to pay for them. NWE's response to C-039, I 12 proves that it depreciates its  
16 street lights over a 34.6 year period. The amortization table shows the amount of the cost of  
17 those lights is recovered plus more than an allowed rate of return in most cases, in less than half  
18 that time. Therefore, there is no reason to keep the street lighting rate base inflated.

19          **Q. How many years are there between March 13, 2007 and September 8, 2014?**

20          A. 7.5 years.

21          **Q. According to Complainants' Exhibit 10, on September 8, 2014, how many years**  
22 **will have passed after the lights in SILMD # 161 will have been fully amortized, assuming**  
23 **that the utility was allowed an 11.65% rate of return and that the original cost of the high**

1 **pressure sodium conversion was no more than \$1,399 and that the ownership charge for**  
2 **the lights of \$15.72 began no later than 1/1/1990.**

3 A. 7.5 years. That is found on Exhibit 10, line 41, column C.

4 **[Proof of Complaint ¶¶ 98 - 100]**

5 **Q. If the ownership charge did not cease on about March 13, 2007, since that time**  
6 **(more than 7.5 years in the case of SILMD # 161 have you and others taxpayers similarly**  
7 **situated in SILMDs # 161 been paying too much for street lighting service that**  
8 **NorthWestern has supplied to SILMDs?**

9 A. It would appear to be so, yes.

10 **Q. What is the estimated monthly and annual overcharge estimated on**  
11 **Complainants' Exhibit 10, line 41, for all lights in SILMD # 161?**

12 A. \$707 a month overcharge. The estimated annual overcharge has been \$8,489.

13 **Q. What is the best estimate of the overcharge accumulated between March 13, 2007**  
14 **and September 8, 2014, for all lights in SILMD # 161?**

15 A. Approximately \$63,666. That is found in Complainants' Exhibit 10, column E, line  
16 41.

17 **[Proof of Complaint ¶¶ 55 – 57]**

18 **Q. You mentioned previously that you paid property taxes on 2527 Wyoming Ave.**  
19 **Is the information on the taxes you pay available as a public record?**

20 A. Yes. And many of the past years of that public record are available online at:

21 <http://www.co.yellowstone.mt.gov/gis/csaprop.asp?propid=200511> . For example, if one clicks  
22 2009 for that year, it will lead to the following URL:

23 <http://www.co.yellowstone.mt.gov/gis/csatydet.asp?propid=A10354&lyear=2009> .

1 ~~ATTORNEY MOTION: We request the Commission to take administrative notice~~  
 2 ~~of the information on Complainants' Exhibit 15, as it is empowered to do pursuant to MCA~~  
 3 ~~§ 2-4-612(6) as specifically adopted by ARM § [38.2.4201](#) of the official public record~~  
 4 ~~concerning what the Grubas paid in property taxes as found through the above URLs as~~  
 5 ~~follows:~~

Complainants' Exhibit 15 (Gruba)			
GRUBA SILMD ASSESSMENTS & OVERCHARGE			
	A	B	C
	Tax Year	SILMD # 161 Assessment	SILMD # 162 Assessment
1	2014	(2/3 year estimate) \$ 75.87	(2/3 year estimate) \$10.85
2	2013	\$113.92	\$ 16.30
3	2012	\$118.20	\$ 15.66
4	2011	\$100.64	\$ 13.04
5	2010	\$100.64	\$ 13.04
6	2009	\$113.06	\$ 13.04
7	2008	\$113.06	\$ 13.04
8	2007	\$119.92	\$ 13.04
9	2006		\$ 13.04
10	2005		\$ 13.04
11	2004		\$ 13.04
12	2003		\$ 13.04
13	2002		\$ 13.50
14	2001		\$ 13.50
15	Total Assessment for overcharge years)	\$855.31	\$187.17
16	Total overcharge 76.3% and 37% of total assessment	\$652.60	\$ 69.25

6  
 7 **[Proof of Complaint ¶¶ 69, 72, 114 & 115]**

8 **Q. Looking at information in the last URL you cited, please tell us what you paid for**  
 9 **street lighting in 2009 in SILMD # 161?**

10 A. In tax year 2009, Elizabeth and I were assessed \$113.06 for street lighting in SILMD #  
 11 161. I got that number from the line on our property tax bill reading "L161 0161 BLGS LIGHT

1 MAINT 56.53 56.53 113.06.” It is the total for the tax year to pay for street lights in Light  
2 Maintenance District (SILMD) 161, and is the last number in the line on that bill. That number  
3 was transferred to the year 2009 line on Complainants’ Exhibit 15.

4 **Q. Can you tell from the online tax statement what you paid in 2009 property taxes**  
5 **to fund SILMD # 162?**

6 A. Yes. We were assessed \$13.04 for street lighting in SILMD # 162. I got that number  
7 from the line on our property tax bill reading “L162 0162 BLGS LIGHT MAINT 6.52 6.52  
8 13.04.” It is the total for the tax year to pay for street lights in Light Maintenance District  
9 (SILMD) 162, and is the last number in the line. I transferred that number to the year 2009 line  
10 on Complainants’ Exhibit 15.

11 **Q. What have you and Beth paid to cover the property taxes assessed for SILMD #**  
12 **161 between January 1, 2001 and September 8, 2014?**

13 A. The total is in the Complainants’ Exhibit 15 table of our property tax payments that I  
14 copied from Yellowstone County’s online records above, \$855.31.

15 **Q. You have calculated the percentage of the total June 2009 bill for SILMD # 161**  
16 **that went to defray the ownership charge was 76.3%. What is 76.3% of your \$855.31 total**  
17 **assessments for SILMD # 162 appearing on your Property Tax Information Statements for**  
18 **7.5 tax years?**

19 A. \$652.60. Beth and I were overcharged approximately \$652.60 for street lighting  
20 service within SILMD # 161 since the estimated original cost of lights in SILMD # 161 were  
21 completely paid for and should have dropped out of the utility rate base.

22 **[Proof of Complaint ¶¶ 64 – 68]**

1           **Q. Let's talk about SILMD # 162. Why are you being charged for street lights**  
2 **there?**

3           A. SILMD # 162 lights are actually in our alley. They shine back there.

4           ~~Q. Not including their cost, are you directly affected by the lights in your alley?~~

5           ~~A. Yes. We are directly affected by North Western's service, which is unreasonable and~~  
6 ~~inadequate because our alley lights shine when they are not needed and are too bright. That~~  
7 ~~brightness inhibits our ability to enjoy the night sky. I cannot use my telescope in my back yard~~  
8 ~~to see stars. We can bring this specific issue before this Commission pursuant to MCA § 69-3-~~  
9 ~~321 (b) & (c).~~

10           ~~Q. Do your neighbors want to change the alley lights?~~

11           ~~A. I haven't talked to anyone who likes these lights in the alley. Our alley is the only one~~  
12 ~~around here with cobra heads. Even if someone said they would feel more secure with the lights~~  
13 ~~on when they put their car in the garage at night, they could also get that light from a yard light~~  
14 ~~on their garage, which could be put on a motion sensor.~~

15           ~~Q. Do you have a suggestion that would accommodate your concern as well as those~~  
16 ~~of any neighbors you have not talked to who might want the light?~~

17           ~~A. Beth and I would like for the light in the alley to either be eliminated or put on a~~  
18 ~~motion sensor so that it is deployed only when needed and off in the early hours of the morning~~  
19 ~~and off at other times when traffic is not present.~~

20           ~~Q. Why can't that happen with the light that is now there?~~

21           ~~A. Current technology does not allow for the high pressure sodium street lights to be~~  
22 ~~deployed by motion sensor or dimmed. There is a strike time for the HPS lights to reset once~~  
23 ~~they have been shut off, so motion sensing and dimming are not practical for HPS lights.~~

1 **~~Q. Is there a technology that can be dimmed and placed on motion sensors?~~**

2 A. ~~LED lights may be deployed with motion sensors or dimming so that in low traffic~~  
3 ~~areas they are only on when needed if auto or foot traffic is in the alley.~~

4 ~~The police like the motion sensing capability because if there is mischief afoot, they can~~  
5 ~~tell where the vandals are by where the lights, sensing motion, are turning on as the culprits flee~~  
6 ~~down an alley.~~

7 ~~LEDs can even be tied to an APP, so when our neighbors come home, they can push a~~  
8 ~~button on their phone and turn the lights on for a few minutes. This lights-on-call technology was~~  
9 ~~employed in 2007 by the 900 citizens of Morgenröthe-Rautenkranz, Germany who were plunged~~  
10 ~~into darkness each night, but given the option to turn the lights on in their area by dialing a~~  
11 ~~number on their mobile telephone. The lights stay off except when needed. By 2009, the town~~  
12 ~~was saving 4000 euros (\$5300) per year. This inspired other towns to adopt the street lights-on-~~  
13 ~~call system. See [http://www.treehugger.com/clean-technology/on-call-street-lights-light-by-](http://www.treehugger.com/clean-technology/on-call-street-lights-light-by-phone-saves-energy-and-city-budgets.html)~~  
14 ~~[phone-saves-energy-and-city-budgets.html](http://www.treehugger.com/clean-technology/on-call-street-lights-light-by-phone-saves-energy-and-city-budgets.html)~~

15 **~~Q. Do you have a recommendation about the spectrum of the light emitted by any~~**  
16 **~~replacement luminaires in your alley?~~**

17 A. ~~I can only quote a lighting consultant, whom I accept as an expert in the field, Nancy~~  
18 ~~Clanton of Nancy Clanton and Associates in Boulder, Colorado. She has presented at roadway~~  
19 ~~meetings of the Illuminating Engineering Society of North America, at Municipal Solid State~~  
20 ~~Lighting Consortium (MSSLC) forums, and elsewhere throughout the nation. She has been a~~  
21 ~~consultant for Anchorage Alaska when it installed LEDs to light its roads and has consulted for~~  
22 ~~the Colorado Department of Transportation, helping develop specifications for lighting Colorado~~  
23 ~~roads. The firm she founded more than 20 years ago has extensive experience with exterior~~

1 ~~lighting projects, including master plans, ordinances, parks and landscape lighting, airport aprons~~  
2 ~~and roadways, municipal roadways, interstate highways, transportation research centers, parking~~  
3 ~~lots, building floodlighting, bridges, and sport centers. She has been Chairperson for the~~  
4 ~~Illuminating Engineering Society of North America (IESNA) Outdoor Environmental Lighting~~  
5 ~~Committee, the Mesopic Committee, and the joint IDA/IESNA Model Lighting Ordinance Task~~  
6 ~~Force. Nancy wrote:~~

7 ~~Ideally, we should be specifying LED luminaires that have the spectral distribution of the~~  
8 ~~full moon, which is similar to sunlight (not daylight, but sunlight) minus a few~~  
9 ~~nanometers that are absorbed by the moon. Color temperature is only an average of the~~  
10 ~~spectral distribution, but may be the best measure we have to date. The moon color~~  
11 ~~temperature is 4125K. Since it is hard to come to this exactly, Anchorage compromised~~  
12 ~~on a few degrees. The important part is not to go too high above this. I would not use 5K~~  
13 ~~lamps. Nature is everywhere. 4K lamps are great for security and safety.~~

14 **[Proof of Complaint ¶¶ 73 - 74]**

15 **Q. Let's move to your objections about what you are being charged for lighting your**  
16 **alley. From Complainants' Exhibit 8, page 110, can we tell what the monthly ownership**  
17 **charge and total bill was in June of 2009 that NorthWestern Energy billed Billings for**  
18 **street light service to SILMD # 162?**

19 A. \$18.90 (of the overall \$50.98 amount) was for the LS ownership charge. The overall  
20 \$50.90 amount is found on page 109.

21 **Q. What percent of the total \$50.90 bill was the \$18.90 ownership charge?**

22 A. Approximately 37% of the charge assessed to SILMD # 162 property owners was for  
23 the ownership charge.

24 **Q. Can we tell from Complainants' Exhibit 8, page 110 what the monthly ownership**  
25 **charge was in June of 2009 for each lighting unit in SILMD # 162?**

26 A. Yes, \$2.70 cents a month.

1           **Q. Can we tell from the \$2.70 cents a month which ownership charge category the**  
2 **SILMD # 162 street lights were in?**

3           A. Yes. Please look at Complainants' Exhibit 2. You will note in Column D that the  
4 \$2.70 monthly ownership charge appears for the 2009 bill. Moving to the left on that same line  
5 (row 1) we see in columns A & B that the \$2.70 is assessed for lights originally costing between  
6 \$200 and \$399 per lighting unit.

7           **Q. Can you tell from Complainants' Exhibit 2 how long it would have taken to pay**  
8 **for street lighting units costing \$200 a unit if payments of \$2.70 were made to cover the cost**  
9 **of the units plus an interest rate of 11.65% on the original investment?**

10          A. Yes. 10.95 years. That's in Column E, row 1.

11          **Q. Why did you use the bottom of the ownership charge range when calculating how**  
12 **long it would take to amortize the original cost of the lights in SILMD # 162?**

13          A. As one can see from the original contracts, the cost of installing lighting the alley was  
14 much less than installing lighting in the street. Until NorthWestern can demonstrate the original  
15 cost of the conversion to the lighting in the alley, the most probable assumption is that when the  
16 alley was converted to HPS, the original wooden poles and overhead wiring stayed in place,  
17 since they are still there. They were there when we moved to our home on Wyoming, in 1995.

18          I also assumed that whatever was left over from the costs of the mercury vapor lights was  
19 depreciated out of the rate base by 1990 pursuant to the PSC Order No. 4938a, paragraph 198,  
20 quoted at footnote 1 in Mr. Barsanti's testimony. It allowed that early depreciation. Since HPS  
21 luminaires typically cost \$200 or less, it was appropriate to use the lower number in the range.  
22 We are sending discovery to NorthWestern on these matters.

23           **[Proof of Complaint ¶¶ 96]**

1           **Q. Assuming that NorthWestern was allowed to earn an 11.65% overall rate of**  
2 **return on its investment in SILMD # 162 lights, when would those lights have been**  
3 **completely paid for?**

4           A. Approximately December 11, 2000, 10.95 years after they were installed.

5           **Q. How many years are there between December 11, 2000 and September 8, 2014?**

6           A. 13.8 years.

7           **Q. How many years will have passed after the lights in SILMD # 162 will have been**  
8 **fully amortized, assuming that the utility was allowed an 11.65% rate of return and that**  
9 **the original cost of the high pressure sodium conversion was no more than \$200 and that**  
10 **the estimated ownership charge for the lights of \$2.70 began no later than 1/1/1990.**

11          A. 13.8.

12          [Proof of Complaint ¶¶ 98 - 101]

13          **Q. If the ownership charge did not cease on about December 11, 2000, since that**  
14 **time (more than 13.8 years in the case of SILMD # 162 have you and other taxpayers**  
15 **similarly situated in SILMDs # 161 been paying too much for street lighting service that**  
16 **NorthWestern has supplied to SILMDs?**

17          A. Definitely, yes.

18          **Q. What is the estimated monthly and annual overcharge for all lights in SILMD #**  
19 **162?**

20          A. \$18.90 a month overcharge. The estimated annual overcharge has been \$226.80.

21          **Q. What is the best estimate of the overcharge accumulating between December 11,**  
22 **2001 and September 8, 2014, for all lights in SILMD # 162?**

23          A. Approximately \$3,119.

1 [Proof of Complaint ¶ 75]

2 Q. What have you and Beth paid to cover the property taxes assessed for SILMD #  
3 162 between December 11, 2000 and September 8, 2014?

4 A. The total is in Complainants' Exhibit 15, the table of our property tax payments that I  
5 copied from Yellowstone County's online records above, \$187.17.

6 Q. You have calculated the percentage of the total June 2009 bill for SILMD # 162  
7 that went to defray the ownership charge was 37%. What is 37% of your \$187.17 in  
8 SILMD # 162 assessments appearing on your Property Tax Information Statements for  
9 13.6 tax years?

10 A. \$69.25. Beth and I were overcharged approximately \$69.25 for street lighting service  
11 within SILMD # 162 since the estimated original cost of lights in SILMD # 162 were completely  
12 paid for and should have dropped out of the utility rate base.

13 [Proof of Complaint ¶¶ 76 - 79]

14 ~~ATTORNEY CLARIFICATION: Your honors, please permit me to summarize for~~  
15 ~~the record for purposes of noting class action standing. The combined \$721.85 (\$652.60~~  
16 ~~+69.25) overcharge assessment imposed on Grubas because of their involvement in~~  
17 ~~SILMDs # 161 and 162, directly affected their property tax payment. That is a personal~~  
18 ~~interest beyond the common interests they have as taxpayers with other taxpayers.~~

19 ~~Thus, Grubas are persons directly affected by the improper rates and profiteering~~  
20 ~~imposed via the private/public partnering which results in the revenue/tax collection~~  
21 ~~procedure harming Grubas and others. That is, the rates imposed on Grubas, which were~~  
22 ~~at least \$721.85 too high, directly affected them because their cumulative property tax bill~~

1 ~~over the last 7 2/3 years in SILMD # 161, and 13 2/3 years in SILMD # 162, became~~  
2 ~~approximately \$721.85 too high.~~

3 ~~Other persons who are property taxpayers in SILMDs 161 and 162 and other~~  
4 ~~SILMDs where NorthWestern Energy owns street lights that have been fully paid for are~~  
5 ~~similarly situated to Grubas.~~

6 ~~To the extent to which Grubas are directly affected by the \$715.55 cumulative~~  
7 ~~multiple year overcharge assessed against them, they have sustained injury to a property~~  
8 ~~right and have thus proven their alleged past injury.~~

9 [Proof of Complaint ¶¶ 80 - 85]

10 **Q. In 2013, what were you and Beth assessed because of SILMDs 161 and 162?**

11 A. It's in Complainants' Exhibit 15. \$113.92 for SILMD # 161, and \$16.30 for SILMD #  
12 162.

13 **Q. What portion of that assessment goes to pay the ownership charge?**

14 A. 76.3% in SILMD # 161 and 37% in SILMD \$ 162. In dollar amounts that is \$86.92 for  
15 SILMD # 161 and \$6.03 for SILMD # 162. The total ownership charge we were assessed in  
16 2013 was \$92.95.

17 **Q. What will you and Beth be overcharged for every year the ownership overcharge**  
18 **continues?**

19 A. If this is allowed to continue, we will be overcharged approximately \$92.95 a year.

20 ~~ATTORNEY COMMENT: To the extent to which Grubas are directly affected by~~  
21 ~~the ongoing \$92.95 a year overcharge assessed against them, they will sustain future injury~~  
22 ~~to a property right and have thus proven their alleged present and threatened injury.~~

1 ~~Further, as a demonstration of the need that our request for a special accountant to~~  
2 ~~be appointed by the Commission and paid for from overcharge refunds we ask the~~  
3 ~~Commission to recognize the complexity of the various overcharges within the various~~  
4 ~~SILMDs as demonstrated by the differences in the overcharges in SILMDs 161 and 162. If~~  
5 ~~we were to use the same methodology to calculate the past, present, and future overcharge~~  
6 ~~in a property selected from SILMD # 228 (378 Cape Cod Dr.) one would come up with past~~  
7 ~~overcharge for years that data is publically available, and with present and future annual~~  
8 ~~overcharges different from those Grubas are experiencing.~~

9 ~~While there are some similarities in how the injuries have occurred, the past,~~  
10 ~~present and future injury to be sustained by the Grubas would be different than and~~  
11 ~~distinguishable from the past, present and future injury sustained by SILMD #228~~  
12 ~~property owners living at 378 Cape Cod Dr. or elsewhere within that SILMD and in other~~  
13 ~~SILMDs. Grubas injuries also are different than injuries to taxpayers who are not in a~~  
14 ~~lighting district but who help pay for the City's share of street lighting in their property~~  
15 ~~taxes, and different than injuries to renters who pay taxes through their rent.~~

16 [Proof of Complaint ¶¶ 58 - 61]

17 Q. Do you have a Levy District assessment on your property tax statement?

18 A. Yes. In tax year 2009, Beth and I were assessed \$1,140.17 for Billings (Levy District).  
19 You can see it in the public record at this URL  
20 (<http://www.co.yellowstone.mt.gov/gis/csatydet.asp?propid=A10354&year=2009>). Once you  
21 have accessed the year 2009, it will be the line reading "Billings (Levy District) 570.09 579.08  
22 1,140.17."

1           **Q. Did part of the \$1,140.17 go to defray the City of Billings pro rata share of street**  
2 **lighting service that the city defrays?**

3           A. Yes. That tax helped pay for street lighting in SILMDs other than SILMDs # 161 &  
4 162.

5           **Q. How are you affected by the Levy District assessment?**

6           A. We have to pay it. If we are late, they assess a penalty. To the extent that the “fee,”  
7 “assessment” “tax” or “amount” (however one wishes to call it) shown on our “Detail Property  
8 Tax Information” statement for our share of the Billings (levy district). It is no different from the  
9 assessment for SILMD # 161 and SILMD # 162. As costs go up or down in any SILMD, whether  
10 it be one that we are afforded standing pursuant to, or a general assessment levy, we are directly  
11 affected because the amount shown on our property tax bill is directly affected as that bill  
12 changes because of lighting costs.

13           **[Proof of Complaint ¶ 105]**

14           **Q. Throughout your testimony you have noted that your overcharge calculations**  
15 **are estimates. Why is that?**

16           A. Until the utility provides the original per unit cost of lights in SILMDs 161 and 162  
17 and their installation date, and the changes in ownership charges over time, it will be difficult to  
18 estimate the exact overcharge because in order to determine the exact date the lights were paid  
19 for by the ownership charge, it is necessary to know the per luminaire cost within the cost range  
20 of the lights.

21           **[Proof of Complaint ¶¶ 208 - 210]**

22           ~~**Q. Are you seeking relief in this proceeding for violation of your constitutional**~~  
23 ~~**rights?**~~

1           ~~A. Yes. Article II, Section 3 of Montana’s Constitution grants Beth and me and others we~~  
2           ~~are representing a right to a “clean and healthful environment.” My degree in environmental~~  
3           ~~studies has reinforced knowledge of the fact that we live in an interdependent world. So, we owe~~  
4           ~~it to ourselves and future generations to be good stewards of the planet. We also shoulder the~~  
5           ~~responsibility to be good citizens and leaders who manage finite fossil fuel resources in ways~~  
6           ~~that lead to a more sustainable world and so that we run out of these finite resources later than~~  
7           ~~would be the case if we continue wasting them. To the extent that NorthWestern is allowed to~~  
8           ~~waste energy by perpetuating the use of inefficient street lighting and thus to overuse finite fossil~~  
9           ~~fuel resources, they are violating our right to a clean and healthful environment.~~

10           **[Proof of Complaint ¶¶ 110 – 114, 215(f) & 216]**

11           **Q. How are you and Beth personally affected by the request for relief you are**  
12           **making in this case?**

13           A. We are asking that the overcharge be refunded and applied to finance energy efficient  
14           lighting. That will address our deep concerned about long term fiscal responsibility. We can’t go  
15           on wasting energy forever. Municipal budgets will not accommodate it. Several cities like  
16           Colorado Springs shut street lights out when faced with the recent budget crisis. ~~Colorado~~  
17           ~~Spring is now installing LEDs in some places to cut costs. Also, we need to devote energy that~~  
18           ~~is now wasted to help bring us toward energy independence. That’s an independence which~~  
19           ~~cannot last if we are not frugal with finite resources. The environmental health of our planet~~  
20           ~~hangs in the balance.~~

21           ~~The USDA and other scientists have found that whether we like it or not, for every 1°C~~  
22           ~~rise in temperature above the optimum during the growing season, yields of wheat, rice, and corn~~

1 ~~can be expected to drop 10 - 17%. This petition addresses all of those concerns not only for us~~  
2 ~~but all taxpayer families in lighting districts served by Northwestern Energy.~~

3 **~~Q. Why did you mention the rise in temperature?~~**

4 ~~A. The evidence continues to mount indicating that the creation of CO2 caused by the~~  
5 ~~burning of fossil fuels is causing temperatures to rise in the air and water, impacting our~~  
6 ~~environment, health, water and air quality, and agricultural production. While the effects of this~~  
7 ~~impact are not totally understood, we know enough to be conservative in our creation of CO2~~  
8 ~~that is not necessary. In Miles City, I was taught to turn out the lights when they were not~~  
9 ~~needed. Over use of street and alley lights is no different.~~

10 **[Proof of Complaint ¶ 103, 104 & 107 - 111]**

11 **RECOMMENDED REMEDIES**

12 **Q. If this Commission determines that there has been an overcharge to you and**  
13 **your neighbors, do you have a preference for how the overcharged that is refunded should**  
14 **be used?**

15 A. Yes. I agree with Mr. Barsanti. First it should be allocated back to our lighting district  
16 ~~to pay for improved LED luminaires with motion sensors and dimming devices to help us lower~~  
17 ~~our property taxes. In cases where the amount rebated is sufficient to cover the cost of solar-~~  
18 ~~powered LED street lights, we should be allowed them. That way street lighting costs would be~~  
19 ~~completely eliminated.~~

20 **Q. When were you and Beth added as petitioners in this case?**

21 A. May 30, 2010.

22 **Q. Between May 30, 2010 and September 8, 2014 what have the total of assessments**  
23 **for the ownership charge in SILMD # 161 been?**

1           A. Based on the 2009 figure that I have used of \$707.40, at least \$36,077 during the 51  
2 months that will have elapsed after we joined as complainants until the time the hearing in this  
3 case begins.(\$707.40 \* 51= \$36,077) That figure is low because the ownership charge rates have  
4 increased.

5           **Q. Did you ask for a temporary rate reduction in this case?**

6           A. Yes, several times. If it had been granted and the reduction applied to purchase LED  
7 street lights, it would have paid for the 45 lights in our district, the ownership charge would have  
8 been eliminated, and we would be enjoying street light bills that are approximately 86% lower  
9 than they are now. In addition, all of us in SILMD # 161 could share the portion of the \$36,077  
10 left over after purchase of the lights.

11           **[Proof of Complaint ¶ 121 & 122]**

12           **Q. If the Commission adopts your approach what would be the result for**  
13 **tax/ratepayers in SILMDs # 161 and 162?**

14           A. we would see a substantial drop in our bills.

15           ~~**Q. You mentioned an 86% drop. Have you used that number to calculate what your**~~  
16 ~~**bill would be if the overcharge were eliminated, past overcharges credited to pay for**~~  
17 ~~**installation of LEDs, and energy charges reduced by 50% as a result of LED installation?**~~

18           ~~A. Our bill in SILMD # 161 would drop from \$113.06 to approximately \$16 a year—an~~  
19 ~~annual savings of \$97. Reduction in the SILMD # 162 bill will put the savings over \$100.~~

20           ~~Imagine, environmentalists and a Commission, that doesn't give environmentalists much~~  
21 ~~credit, working together to save Montana families each about \$100 a year? What is not to like in~~  
22 ~~that?~~

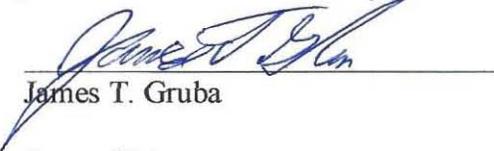
23           Thank you to the Commission for your consideration of my testimony.

1 Q. And thank you Mr. Gruba for your efforts on behalf of the state you and Beth  
2 love.

3 ~~ATTORNEY MOTION: We move pursuant to M.R.Civ.P. 15(a)(2) and (b)(1) to~~  
4 ~~have the pleadings herein amended to reflect and conform to the testimony just given with~~  
5 ~~regard to numbers in the petition and other corrections and updates. We ask that the other~~  
6 ~~parties in the proceeding consent to the amendment.~~

7

8 I, James T. Gruba, do hereby certify that these pages of typewritten material are a full,  
9 correct, and truthful rendition of my pre-filed written testimony given under oath.

10   
11 James T. Gruba

12  
13 State of Montana  
14 County of Yellowstone

15 Signed and sworn to before me on March 21, 2014 by James T. Gruba.

16   
17 Notary

