Control Number: 39925

Item Number: 5

Addendum StartPage: 0

DOCKET NO. 39975

APPLICATION OF SOUTHWES	§	
TERN PUBLIC SERVICE COMPANY	§	PUBLIC UTILITY COMMISSION
FOR AUTHORITY TO REVISE ITS	§	
FUEL FACTOR FORMULAS; CHANGE	§	
ITS FUEL FACTORS; AND FOR	§	OF TEXAS
RELATED RELIEF	§	
	§	

DIRECT TESTIMONY
of
MICHAEL E. MALLY
on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

(*Filename*: Mallydirect.doc)

Table of Contents

GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
Commission	Public Utility Commission of Texas
kWh	Kilowatt-hour
MWh	Megawatt-hour
MMBtu	Million British Thermal Unit
NYMEX	New York Mercantile Exchange
PSCo	Public Service Company of Colorado, a Colorado corporation
SPS	Southwestern Public Service Company
Xcel Energy	Xcel Energy Inc., parent of SPS
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

Attachment	Description
MEM-1	Revised Formulas (*Filename*: MEM-1 (pgs 1& 2).doc); (*Filename*: MEM-1 (pgs 3 & 4).xls)
MEM-2	Tariff Sheets for Fixed Fuel Factors (*Filename*: MEM-2.doc)

DIRECT TESTIMONY
OF
MICHAEL MALLY

1   **I.   WITNESS IDENTIFICATION AND QUALIFICATIONS**

2   **Q.**   **Please state your name and business address.**

3   A.   My name is Michael E. Mally. My business address is 1800 Larimer, Denver, Colorado.

4   **Q.**   **On whose behalf are you testifying in this proceeding?**

5   A.   I am filing testimony on behalf of Southwestern Public Service Company

6   ("SPS"), a New Mexico corporation and wholly owned subsidiary of Xcel Energy

7   Inc. ("Xcel Energy"). Xcel Energy is a registered holding company that owns

8   several electric and natural gas utility operating companies and a regulated natural

9   gas pipeline company.[1]

10   **Q.**   **By whom are you employed and in what position?**

11   A.   I am employed by Xcel Energy Services Inc. ("XES"), the service company subsidiary of

12   Xcel Energy, as Manager, Revenue and Cost Analysis.

13   **Q.**   **Please briefly describe your duties as Manager, Revenue and Cost Analysis.**

14   A.   My duties include developing jurisdictional revenue requirements and cost of service

15   studies. Additionally, I am responsible for coordinating and preparing SPS fuel filings as

16   well as the development of related fuel recovery mechanisms. Finally, I am responsible

17   for supervising the development of revenue forecasts for the Operating Companies during

18   the annual budget and monthly forecasting processes.

---

[1]   Xcel Energy is the parent company of the following four wholly owned utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado ("PSCo"), a Colorado corporation; and SPS. Xcel Energy's gas pipeline subsidiary is WestGas InterState, Inc.

1	Q.	**Please describe your educational background.**
2	A.	I attended Colorado State University from 1981 to 1984. I graduated from University of
3		Denver in 1985 with a Bachelor of Science degree in Business Administration, with an
4		emphasis in finance.
5	Q.	**Please describe your professional experience.**
6	A.	I began doing regulatory work in 1989 for PSCo and subsequently for New
7		Century Services, Inc. and XES. I have worked in various positions including
8		Contract Specialist, Rate Applications Analyst, Rate Accountant, Pricing
9		Specialist, and Rate Consultant. In July 2005, I accepted my current position as
10		Manager, Revenue and Cost Analysis for XES.
11	Q.	**Have you previously testified before any regulatory commission?**
12	A.	Yes. I have testified before the Public Utility Commission of Texas
13		("Commission"), the New Mexico Public Regulation Commission, and the
14		Federal Energy Regulatory Commission.

II.   ASSIGNMENT

1

2   **Q.   What is your assignment in this proceeding?**

3   A.   I will present SPS's proposed fuel factor formulas. Also, I will present the fuel

4   factors resulting from the proposed formulas and the applicable market

5   information used to derive those factors. In addition, I will present SPS's

6   proposed tariff sheet reflecting revised fuel factors derived from the proposed

7   formulas.

| 1 | | **III.** | **SPS'S PROPOSED FUEL FACTOR FORMULAS** |

| 2 | **Q.** | **What methodology is SPS currently using to determine its fixed fuel factors?** |

| 3 | A. | As explained in the direct testimony of SPS witness Karen Roberts, SPS currently |

| 4 | | utilizes Commission-approved formulas to set its fixed fuel factors. |

| 5 | **Q.** | **What formulas does SPS currently use to adjust its fixed fuel factors?** |

| 6 | A. | The current Commission-approved formulas are the following: |

7   Jun-Sept factor in \$/MWh $= 32.395 + (4.930 (G - 5.578))$

8   Oct-May factor in \$/MWh $= 32.211 + (4.316 (G - 6.113))$

9   Where G is the average of the New York Mercantile Exchange ("NYMEX")

10   closing prices for natural gas at the Henry Hub for the last 20 trading days prior to

11   the filing. Closing prices included in the 20 day average will start with closing

12   prices for the month that the fuel factors will be effective and extend forward for

13   the subsequent 12 months.

14   When the current formulas were approved in 2009, the system average

15   eligible fuel and purchased energy costs were projected to be \$32.395 per

16   megawatt-hour ("MWh") for the June-September period, and \$32.211/MWh for

17   the October-May period. At the time the forecast was produced, the average

18   NYMEX prices for the last twenty trading days of the month prior to filing for the

19   formula change were \$5.578 per million British thermal unit ("MMBtu") for

20   June-September and \$6.113/MMBtu for October-May. The change in eligible

21   system average fuel cost for each dollar change in the price of natural gas was

22   projected to be \$4.930/MWh for June-September and \$4.316/MWh for October-

23   May.

| 1 | Q. | **What are the revised formulas SPS is proposing to use?** |

| 2 | A. | The revised formulas SPS proposes are: |

Jun-Sept factor in $ per MWh = 34.681 + (6.701 (Waha – 3.915))

Oct-May factor in $ per MWh = 34.458 + (6.480 (Waha – 3.909))

Where Waha is the average of the last twenty trading days prior to filing of NYMEX closing prices for natural gas at the Henry Hub plus the closing prices for the Waha Basis Differential. Prices included in the 20 day average will start with the month in which the fuel factors will be effective and extend forward for twelve months.

Projections of eligible fuel and purchased energy costs are $34.681/MWh for the June-September period, with each dollar change in natural gas prices projected to change the eligible fuel cost by $6.701/MWh. The average Waha price as described above for June-September at the time of the forecast was $3.915. Projections of eligible fuel and purchased energy costs are $34.458/MWh for the October-May period, with each dollar change in natural gas prices projected to change the eligible fuel cost by $6.480/MWh. The average Waha price as described above for October-May at the time of the forecast was $3.909. Both the summer and winter fuel factors will be updated each time SPS makes a filing under SUBST. R. 25.237.

| 20 | Q. | **How do you determine the effect on system average cost of one dollar change** |
| 21 | | **in gas prices?** |

| 22 | A. | The model used to determine the system average fuel and purchased power costs |
| 23 | | is re-run with gas prices increased by one dollar and with gas prices decreased by |

1		one dollar. By comparing the change in system average cost for both runs against
2		the cost resulting from the base case it can be determined what the effect of a
3		dollar change in gas has on the system average cost.
4	Q.	**Were the new formulas developed in the same manner as the current**
5		**formulas?**
6	A.	Yes. Production cost models for the period of January 2012 through December
7		2012 were developed using energy price forecasts and load forecasts. The
8		production cost modeling, energy price forecasts, and other factors affecting
9		SPS's dispatch of its resources are described in David Horneck's direct testimony.
10		Luke Jaramillo describes the load forecast in his direct testimony. After the fuel
11		and purchased power costs were determined using the production cost model,
12		adjustments were made to determine eligible fuel and purchased power costs.
13	Q.	**Why is it necessary to adjust the results of the production cost model to**
14		**determine eligible fuel and purchased power costs?**
15	A.	SPS serves retail customers in New Mexico and Texas, and it also has wholesale
16		customers. SPS treats its system as a whole for dispatch and modeling purposes,
17		but because the different jurisdictions define eligible or recoverable fuel and
18		purchased power costs differently (either through rules or regulatory orders), it is
19		necessary to make adjustments to the output of the production cost model to
20		account for these differences.

1   Q.   **Do the formulas consider all Commission rules and previous Commission**

2   **orders that would have an effect on eligible fuel and purchased power costs?**

3   A.   Yes.   Attachment MEM-1, page 3, starts with total company fuel costs and

4   purchased energy costs from the production cost model (line nos. 5 and 7) and

5   makes adjustments to arrive at a total company eligible fuel and purchased energy

6   costs in accordance with rules and previous Commission orders (line No. 12).

7   The projected eligible costs are then allocated to arrive at Texas applicable fuel

8   costs (see line no. 23).

| | | | IV. | SPS'S PROPOSED FUEL FACTORS |

1   **IV.   SPS'S PROPOSED FUEL FACTORS**

2   **Q.   What are the fuel factors that SPS is proposing?**

3   A.   SPS is proposing fuel factors of $0.034681 per kilowatt-hour ("kWh") for June-

4   September and $0.034458/kWh for October-May. Those factors are based on the

5   proposed formulas using the average of the 20 trading days from October 10,

6   2011 through November 4, 2011 of NYMEX closing prices for natural gas at the

7   Henry Hub plus the closing prices for the Waha Basis Differential for the

8   applicable months of 2012. These fuel factors are then differentiated to account

9   for line losses corresponding to the type of voltage at which the electric service is

10   provided using multipliers based on SPS's most recently approved line loss study

11   from Docket No. 38147.[2]

12   The following table shows a comparison of the current factors with the

13   factors resulting from the new formula.

14

Table MEM- 1

	Current Fuel Factors June – Sept.	Current Fuel Factors Oct. - May	Proposed Fuel Factors June - Sept	Proposed Fuel Factors Oct - May
	$/kWh	$/kWh	$/kWh	$/kWh
Voltage Level Fuel Factors	0.029797	0.028787	0.034681	0.034458
Secondary Distribution	0.030785	0.029849	0.036249	0.036152
Primary Distribution	0.030391	0.029467	0.035595	0.035499
Sub-transmission	0.028481	0.027616	0.033037	0.032948
Backbone Transmission	0.028278	0.027418	0.032792	0.032704

---

[2]   Tex. Pub. Util. Comm'n, *Application of Southwestern Public Service Company for Authority to Change Rates and to Reconcile Fuel and Purchased Power Costs for 2008 and 2009.* Docket No. 38147 (March 25, 2011).

1 Q. **Have you prepared a tariff reflecting the fuel factors resulting from the**

2   **application of the updated formulas?**

3 A. Yes. I have prepared a tariff for the summer (June through September) and winter

4   (October through May) fuel factors derived from the proposed formulas. These

5   are shown in Attachment MEM-2.

1   V.   <u>CONCLUSION</u>

2   **Q.   Were Attachments MEM-1 and MEM-2 prepared by you or under your**

3   **supervision and control?**

4   A.   Yes.

5   **Q.   Does this conclude your testimony?**

6   A.   Yes.

AFFIDAVIT

STATE OF TEXAS)

)

COUNTY OF POTTER)

MICHAEL E. MALLY, first being sworn on his oath, states:

    I am the witness identified in the preceding testimony. I have read the testimony and the accompanying attachments and am familiar with their contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

DONNA M. ANDERSON
NOTARY PUBLIC,
STATE OF TEXAS
My Commission Expires 06-17-2012
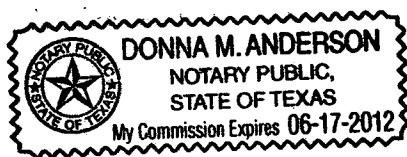
_____
MICHAEL E. MALLY

Subscribed and sworn to before me this _15_ day of November 2011 by MICHAEL E. MALLY.

Donna M. Anderson
Notary Public, State of Texas
My Commission Expires: _6/17/2012_

Semi-Annual Adjustment Formula

June through September Fuel Cost Factor expressed in $ per MWh

= 34.681 + (6.701 (Waha − 3.915))

Where:

34.681	=	Average Texas Retail fuel cost factor in dollars per MWh covering June through September as shown on pages 3 and 4;
6.701	=	Based on PROSYM analysis, SPS estimates that for every one dollar ($1.00) per MMBtu change in the price of natural gas would result in a change in reconcilable fuel expense equal to $6.701 per MWh:
Waha	=	NYMEX + WBD
NYMEX =		the average of NYMEX closing prices for natural gas at the Henry Hub for the last 20 trading days of the month prior to filing. Closing prices included in the 20 day average will start with prices for the month that the factors will be effective;
WBD	=	the average Waha closing basis differentials for the last 20 trading days of the month prior to filing. Closing prices included in the 20 day average will start with prices for the month that the factors will be effective;
3.915 =		This factor was calculated based on the average of the 20 trading days of October 10, 2011 through November 4, 2011 of the NYMEX Henry Hub closing prices plus the Waha Basis Differential closing prices for the months of June through September 2012. This time period was used in the development of the $34.681 per MWh fuel cost factor.

15

Semi-Annual Adjustment Formula

October through May Fuel Cost Factor expressed in $ per MWh

= 34.458 + (6.480 (Waha − 3.909))

Where:

34.458 = Average Texas Retail fuel cost factor in dollars per MWh covering October through May as shown on pages 3 and 4;

6.480 = Based on PROSYM analysis, SPS estimates that for every one dollar ($1.00) per MMBtu change in the price of natural gas would result in a change in reconcilable fuel expense equal to $6.480 per MWh:

Waha = NYMEX + WBD

NYMEX = the average of NYMEX closing prices for natural gas at the Henry Hub for the last 20 trading days of the month prior to filing. Closing prices included in the 20 day average will start with prices for the month that the factors will be effective;

WBD = the average Waha closing basis differentials for the last 20 trading days of the month prior to filing. Closing prices included in the 20 day average will start with prices for the month that the factors will be effective;

3.909 = This factor was calculated based on the average of the 20 trading days of October 10, 2011 through November 4, 2011 of the NYMEX Henry Hub closing prices plus the Waha Basis Differential closing prices for the months of October through May 2012. This time period was used in the development of the $34.458 per MWh fuel cost factor.

SOUTHWESTERN PUBLIC SERVICE COMPANY
BASE SETTLEMENT FUEL COST FACTOR CALCULATION
RATE YEAR CALENDAR YEAR 2012

Line No.		June-12	July-12	August-12	September-12	October-12	November-12	December-12	January-12	February-12	March-12	April-12	May-12	Total
			SUMMER MONTHS							WINTER MONTHS				
	Eligible Fuel Expense													
5	Total Company Fuel Cost	$ 55,010,520	$ 65,154,920	$ 65,278,630	$ 54,332,950	$ 53,076,904	$ 48,478,838	$ 48,993,239	$ 48,802,009	$ 45,183,122	$ 50,079,529	$ 50,591,780	$ 52,952,120	$ 637,934,560
6	Less Certain TUCO Coal Costs (1)	(3,474,975)	(3,474,975)	(3,474,975)	(3,474,975)	(3,524,975)	(3,989,084)	(3,474,975)	(3,474,975)	(3,681,388)	(3,474,975)	(3,524,975)	(3,474,975)	(42,520,226)
7	Plus Energy Cost of Purchased Power (Less SunEd REC and Avoided)	37,669,566	37,982,468	35,939,954	35,373,426	28,929,144	34,735,528	39,739,530	38,922,122	34,257,618	31,812,504	33,161,594	36,456,584	424,980,038
8	Less Energy Cost of Opportunity Sales (2)	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Less Renewable Energy Credits	(114,170)	(85,793)	(65,016)	(81,284)	(108,108)	(107,217)	(142,817)	(130,829)	(110,943)	(129,074)	(124,956)	(124,673)	(1,324,877)
10	Less Variable O&M Expense Under Long-term PPAs (3)	(1,559,960)	(1,612,340)	(1,567,510)	(1,519,020)	(1,135,000)	(1,447,260)	(1,557,620)	(1,622,630)	(1,430,120)	(1,243,130)	(1,363,920)	(1,594,380)	(17,652,890)
11														
12	Total Company Eligible Fuel Expense (A)	$ 87,530,981	$ 97,964,280	$ 96,111,082	$ 84,631,097	$ 77,237,964	$ 77,670,805	$ 83,557,357	$ 82,495,697	$ 74,218,289	$ 77,044,854	$ 78,739,522	$ 84,214,676	$ 1,001,416,605
	Texas Fuel Allocation Factor													
17	Applicable Texas Retail Sales @ Source (B)	1,325,808,924	1,504,771,437	1,474,308,345	1,272,015,855	1,239,825,615	1,219,344,616	1,312,186,549	1,281,063,205	1,122,535,336	1,174,623,205	1,155,042,444	1,249,055,427	15,330,580,956
19	Applicable Total Company Sales @ Source (C)	2,761,606,308	3,060,931,058	3,005,639,599	2,654,422,099	2,479,900,413	2,446,535,752	2,645,706,015	2,568,507,094	2,302,783,885	2,449,033,355	2,475,715,881	2,607,035,665	31,457,817,126
21	Texas Fuel Allocator (B)/(C)	0.480086144	0.491605792	0.490514014	0.479206323	0.499949759	0.498396402	0.495966389	0.498757900	0.487468817	0.479627279	0.466548869	0.479109451	
23	Texas Applicable Fuel Cost (D)	$ 42,022,411	$ 48,159,807	$ 47,143,833	$ 40,555,757	$ 38,615,102	$ 38,710,850	$ 41,441,808	$ 41,145,381	$ 36,179,101	$ 36,952,814	$ 36,735,835	$ 40,348,047	$ 488,010,746
26	Applicable Texas Retail Sales @ Meter (E)	1,222,839,588	1,381,292,705	1,354,667,426	1,170,280,925	1,144,208,598	1,127,268,986	1,207,732,628	1,177,938,070	1,033,700,731	1,085,789,496	1,069,533,343	1,154,027,560	14,129,280,056
29	Texas Retail Fuel Cost Factor (D)/(E)	$ 0.034365	$ 0.034866	$ 0.034801	$ 0.034655	$ 0.033748	$ 0.034340	$ 0.034314	$ 0.034930	$ 0.035000	$ 0.034033	$ 0.034348	$ 0.034963	$ 0.034539

Baseline Avg Fuel Cost (October - May) Winter	$	0.034458
New Avg Fuel Cost (increase $1.00)	$	0.040918
Difference	$	0.006460
Baseline Avg Fuel Cost (October - May) Winter	$	0.034458
New Avg Fuel Cost (decrease $1.00)	$	0.027959
Difference	$	(0.006499)
Average Difference to be used in Formula		0.006480

Baseline Avg Fuel Cost (June - September) Summer	$	0.034681
New Avg Fuel Cost (increase $1.00)	$	0.041243
Difference	$	0.006562
Baseline Avg Fuel Cost (June - September) Summer	$	0.034681
New Avg Fuel Cost (decrease $1.00)	$	0.027842
Difference	$	(0.006839)
Average Difference to be used in Formula	$	0.006701

June - September Seasonal (Summer) TX Retail Fuel Cost Factor	$ 0.034681
October - May Seasonal (Winter) TX Retail Fuel Cost Factor	$ 0.034458
Average Annual TX Retail Fuel Cost Factor	$ 0.034539

Footnotes:
(1) Excludes certain TUCO coal costs pursuant to the Unanimous Settlement in Docket No. 32766.
(2) Eliminated and set to zero since no forecasted costs or sales for Opportunity Sales have been included in Prosym modeling.
(3) Pursuant to the Unanimous Settlement in Docket No. 32766.

VOLTAGE LEVEL FACTORS
RATE YEAR CALENDAR YEAR 2012

Voltage Level — Annual	Texas Sales @ Meter (1)	Texas Sales @ Source (2)	Loss Factor (3)	Loss Multiplier (4)	Voltage Level Fuel Factor (5)	Texas Sales @ Meter (1)	Texas Fuel Revenue Rate Year Col (5) * (1)
Secondary Distribution Level	5,314,996,224	6,018,909,009	1.132439	1.047755	0.036188	5,314,996,224	$ 192,339,083
Primary Distribution Level	2,448,277,141	2,722,486,629	1.112001	1.028846	0.035535	2,448,277,141	$ 86,999,528
Sub-Transmission Level	1,049,610,424	1,083,291,373	1.032089	0.954909	0.032982	1,049,610,424	34,618,251
Backbone Transmission Level	5,310,645,354	5,440,368,488	1.024427	0.947820	0.032737	5,310,645,354	173,854,597
Total	14,123,529,144	15,265,055,499	1.080824			14,123,529,144	$ 487,811,460

Voltage Level — June through September (Summer)	Texas Sales @ Meter (1)	Texas Sales @ Source (2)	Loss Factor (3)	Loss Multiplier (4)	Voltage Level Fuel Factor (5)	Texas Sales @ Meter (1)	Texas Fuel Revenue Rate Year Col (5) * (1)
Secondary Distribution Level	2,034,479,496	2,303,923,926	1.132439	1.045216	0.036249	2,034,479,496	$ 73,747,847
Primary Distribution Level	831,682,484	924,831,754	1.112001	1.026352	0.035595	831,682,484	29,603,738
Sub-Transmission Level	330,233,468	340,830,329	1.032089	0.952595	0.033037	330,233,468	10,909,923
Backbone Transmission Level	1,803,537,649	1,847,592,663	1.024427	0.945523	0.032792	1,803,537,649	59,141,607
Total	4,999,933,097	5,417,178,672	1.083450			4,999,933,097	$ 173,403,115

Voltage Level — October through May (Winter)	Texas Sales @ Meter (1)	Texas Sales @ Source (2)	Loss Factor (3)	Loss Multiplier (4)	Voltage Level Fuel Factor (5)	Texas Sales @ Meter (1)	Texas Fuel Revenue Rate Year Col (5) * (1)
Secondary Distribution Level	3,280,516,728	3,714,985,083	1.132439	1.049152	0.036152	3,280,516,728	$ 118,597,241
Primary Distribution Level	1,616,594,657	1,797,654,875	1.112001	1.030217	0.035499	1,616,594,657	57,387,494
Sub-Transmission Level	719,376,957	742,461,044	1.032089	0.956182	0.032948	719,376,957	23,702,032
Backbone Transmission Level	3,507,107,705	3,592,775,825	1.024427	0.949084	0.032704	3,507,107,705	114,696,450
Total	9,123,596,047	9,847,876,827	1.079385			9,123,596,047	$ 314,383,217

FORWARD PRICE CURVES

NYMEX

	10-Oct-11	11-Oct-11	12-Oct-11	13-Oct-11	14-Oct-11	17-Oct-11	18-Oct-11	19-Oct-11	20-Oct-11	21-Oct-11	24-Oct-11	25-Oct-11	26-Oct-11	27-Oct-11	28-Oct-11	31-Oct-11	01-Nov-11	02-Nov-11	03-Nov-11	04-Nov-11
01-Jan-12	4.006	4.008	3.950	3.971	4.100	4.037	3.927	3.950	3.950	3.964	3.950	3.977	3.911	3.896	4.042	4.056	3.920	3.882	3.901	3.892
01-Feb-12	4.028	4.028	3.970	3.989	4.111	4.052	3.946	3.970	3.978	3.978	3.935	3.992	3.928	3.911	4.053	4.065	3.930	3.893	3.909	3.900
01-Mar-12	3.994	3.999	3.939	3.953	4.073	4.020	3.915	3.938	3.945	3.945	3.901	3.959	3.898	3.882	4.020	4.034	3.903	3.867	3.882	3.874
01-Apr-12	3.981	3.987	3.929	3.941	4.053	4.008	3.904	3.926	3.929	3.929	3.890	3.948	3.892	3.875	4.010	4.026	3.900	3.862	3.879	3.871
01-May-12	4.015	4.021	3.965	3.977	4.087	4.044	3.941	3.962	3.963	3.963	3.923	3.981	3.928	3.912	4.042	4.060	3.936	3.897	3.913	3.905
01-Jun-12	4.055	4.061	4.007	4.018	4.126	4.086	3.984	4.005	4.004	4.004	3.963	4.020	3.968	3.953	4.080	4.101	3.979	3.939	3.953	3.943
01-Jul-12	4.098	4.104	4.052	4.063	4.169	4.131	4.030	4.051	4.049	4.049	4.008	4.065	4.014	4.000	4.125	4.145	4.026	3.986	3.999	3.989
01-Aug-12	4.121	4.129	4.079	4.090	4.194	4.156	4.056	4.077	4.075	4.075	4.033	4.090	4.040	4.027	4.150	4.169	4.051	4.011	4.024	4.016
01-Sep-12	4.121	4.131	4.082	4.093	4.196	4.156	4.056	4.077	4.075	4.075	4.034	4.091	4.042	4.029	4.152	4.169	4.052	4.013	4.026	4.018
01-Oct-12	4.155	4.167	4.120	4.131	4.233	4.192	4.091	4.112	4.110	4.110	4.070	4.128	4.080	4.069	4.191	4.208	4.092	4.053	4.065	4.056
01-Nov-12	4.305	4.313	4.269	4.279	4.378	4.342	4.246	4.267	4.264	4.264	4.218	4.272	4.228	4.217	4.333	4.346	4.237	4.193	4.203	4.195
01-Dec-12	4.592	4.587	4.547	4.554	4.645	4.607	4.516	4.535	4.527	4.527	4.476	4.527	4.485	4.474	4.582	4.595	4.497	4.452	4.464	4.456

WBD

	10-Oct-11	11-Oct-11	12-Oct-11	13-Oct-11	14-Oct-11	17-Oct-11	18-Oct-11	19-Oct-11	20-Oct-11	21-Oct-11	24-Oct-11	25-Oct-11	26-Oct-11	27-Oct-11	28-Oct-11	31-Oct-11	01-Nov-11	02-Nov-11	03-Nov-11	04-Nov-11
01-Jan-12	-0.185	-0.185	-0.165	-0.168	-0.160	-0.143	-0.140	-0.160	-0.165	-0.165	-0.158	-0.153	-0.150	-0.150	-0.143	-0.120	-0.128	-0.123	-0.120	-0.133
01-Feb-12	-0.180	-0.180	-0.170	-0.170	-0.163	-0.145	-0.138	-0.158	-0.160	-0.155	-0.148	-0.148	-0.140	-0.140	-0.133	-0.120	-0.125	-0.125	-0.105	-0.115
01-Mar-12	-0.165	-0.185	-0.175	-0.175	-0.168	-0.150	-0.145	-0.165	-0.170	-0.170	-0.165	-0.165	-0.150	-0.150	-0.143	-0.125	-0.130	-0.130	-0.120	-0.130
01-Apr-12	-0.203	-0.198	-0.188	-0.185	-0.180	-0.168	-0.168	-0.175	-0.190	-0.190	-0.188	-0.190	-0.190	-0.190	-0.185	-0.175	-0.185	-0.190	-0.190	-0.180
01-May-12	-0.205	-0.200	-0.190	-0.188	-0.183	-0.170	-0.170	-0.175	-0.190	-0.183	-0.180	-0.190	-0.190	-0.190	-0.185	-0.175	-0.185	-0.190	-0.190	-0.185
01-Jun-12	-0.198	-0.193	-0.183	-0.180	-0.175	-0.163	-0.163	-0.168	-0.183	-0.118	-0.118	-0.118	-0.118	-0.118	-0.118	-0.102	-0.113	-0.118	-0.118	-0.178
01-Jul-12	-0.130	-0.125	-0.115	-0.115	-0.110	-0.098	-0.098	-0.103	-0.118	-0.118	-0.115	-0.118	-0.118	-0.118	-0.113	-0.103	-0.113	-0.118	-0.118	-0.110
01-Aug-12	-0.130	-0.125	-0.115	-0.115	-0.110	-0.098	-0.098	-0.103	-0.118	-0.118	-0.115	-0.118	-0.118	-0.118	-0.113	-0.102	-0.113	-0.118	-0.118	-0.110
01-Sep-12	-0.178	-0.173	-0.163	-0.163	-0.158	-0.155	-0.155	-0.160	-0.175	-0.175	-0.173	-0.175	-0.175	-0.175	-0.170	-0.160	-0.170	-0.175	-0.175	-0.160
01-Oct-12	-0.228	-0.223	-0.213	-0.213	-0.208	-0.195	-0.195	-0.200	-0.215	-0.215	-0.213	-0.215	-0.215	-0.215	-0.210	-0.200	-0.210	-0.215	-0.215	-0.213
01-Nov-12	-0.230	-0.230	-0.230	-0.230	-0.230	-0.225	-0.225	-0.225	-0.230	-0.230	-0.230	-0.235	-0.225	-0.225	-0.213	-0.205	-0.205	-0.208	-0.208	-0.203
01-Dec-12	-0.170	-0.170	-0.190	-0.190	-0.190	-0.185	-0.185	-0.185	-0.190	-0.190	-0.190	-0.195	-0.190	-0.190	-0.178	-0.170	-0.175	-0.178	-0.178	-0.173

Waha

	10-Oct-11	11-Oct-11	12-Oct-11	13-Oct-11	14-Oct-11	17-Oct-11	18-Oct-11	19-Oct-11	20-Oct-11	21-Oct-11	24-Oct-11	25-Oct-11	26-Oct-11	27-Oct-11	28-Oct-11	31-Oct-11	01-Nov-11	02-Nov-11	03-Nov-11	04-Nov-11
01-Jan-12	3.821	3.823	3.785	3.804	3.940	3.895	3.787	3.790	3.799	3.785	3.763	3.825	3.761	3.746	3.900	3.936	3.793	3.760	3.781	3.760
01-Feb-12	3.848	3.848	3.800	3.819	3.949	3.907	3.809	3.813	3.818	3.808	3.788	3.845	3.788	3.771	3.921	3.945	3.805	3.768	3.804	3.785
01-Mar-12	3.829	3.814	3.764	3.778	3.906	3.870	3.770	3.773	3.775	3.757	3.736	3.794	3.748	3.732	3.878	3.909	3.773	3.737	3.762	3.744
01-Apr-12	3.779	3.790	3.742	3.756	3.873	3.841	3.737	3.751	3.739	3.720	3.703	3.758	3.702	3.685	3.825	3.851	3.715	3.672	3.689	3.691
01-May-12	3.810	3.821	3.775	3.790	3.905	3.874	3.771	3.787	3.773	3.753	3.736	3.791	3.738	3.722	3.857	3.885	3.751	3.707	3.723	3.720
01-Jun-12	3.858	3.869	3.825	3.838	3.951	3.924	3.822	3.838	3.822	3.801	3.783	3.838	3.786	3.771	3.903	3.934	3.802	3.757	3.771	3.766
01-Jul-12	3.968	3.979	3.937	3.948	4.059	4.034	3.933	3.949	3.932	3.911	3.893	3.948	3.897	3.883	4.013	4.043	3.914	3.869	3.882	3.879
01-Aug-12	3.991	4.004	3.964	3.975	4.084	4.058	3.959	3.975	3.958	3.937	3.918	3.973	3.923	3.910	4.038	4.067	3.939	3.894	3.907	3.906
01-Sep-12	3.944	3.959	3.920	3.931	4.039	4.001	3.901	3.917	3.900	3.879	3.862	3.916	3.867	3.854	3.982	4.009	3.882	3.838	3.851	3.858
01-Oct-12	3.928	3.945	3.908	3.919	4.026	3.997	3.896	3.912	3.895	3.874	3.858	3.913	3.865	3.854	3.981	4.008	3.882	3.838	3.850	3.844
01-Nov-12	4.075	4.083	4.039	4.049	4.148	4.117	4.021	4.042	4.034	4.008	3.988	4.037	4.003	3.992	4.121	4.141	4.032	3.986	3.996	3.993
01-Dec-12	4.422	4.417	4.357	4.364	4.455	4.422	4.331	4.350	4.337	4.308	4.286	4.332	4.295	4.284	4.405	4.425	4.322	4.275	4.287	4.284

Winter Waha Average	3.909
Summer Waha Average	3.915

19

XcelEnergy℠

SOUTHWESTERN PUBLIC SERVICE

ELECTRIC TARIFF

FUEL COST RECOVERY FACTOR

Application of fuel cost recovery factors are as follows:

SECONDARY DISTRIBUTION FUEL COST RECOVERY FACTOR:

The Secondary Distribution fuel cost recovery factor to be billed is 3.6249¢ per kilowatt-hour for the months of June-September and 3.6152¢ per kilowatt-hour for the months of October-May and shall apply when service is metered at less than approximately 2.4 kV.

PRIMARY DISTRIBUTION FUEL COST RECOVERY FACTOR:

The Primary Distribution fuel cost recovery factor to be billed is 3.5595¢ per kilowatt-hour for the months of June-September and 3.5499¢ per kilowatt-hour for the months of October- May and shall apply when service is metered at greater than or equal to approximately 2.4 kV and less than approximately 69 kV.

SUB-TRANSMISSION FUEL COST RECOVERY FACTOR:

The Sub-transmission fuel cost recovery factor to be billed is 3.3037¢ per kilowatt-hour for the months of June-September and 3.2948¢ per kilowatt-hour for the months of October-May and shall apply when service is metered at greater than or equal to approximately 69 kV and less than approximately 115 kV or loss compensated meters are used to include losses to the sub-transmission.

BACKBONE-TRANSMISSION FUEL COST RECOVERY FACTOR:

The Backbone transmission fuel cost recovery factor to be billed is 3.2792¢ per kilowatt-hour for the months of June-September and 3.2704¢ per kilowatt-hour for the months of October-May and shall apply when service is metered at greater than or equal to approximately 115 kV or loss compensated meters are used to include losses to the backbone transmission.

DIRECTOR, REGULATORY ADMINISTRATION