

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

<b>IN THE MATTER OF SOUTHWESTERN</b>	)	
<b>PUBLIC SERVICE COMPANY’S</b>	)	
<b>APPLICATION FOR REVISION OF ITS</b>	)	
<b>RETAIL RATES UNDER ADVICE</b>	)	<b>CASE NO. 15-00139-UT</b>
<b>NOTICE NO. 255,</b>	)	
	)	
<b>SOUTHWESTERN PUBLIC SERVICE</b>	)	
<b>COMPANY,</b>	)	
	)	
<b>APPLICANT.</b>	)	
<hr/>	)	

**DIRECT TESTIMONY**

*of*

**H. CRAIG ROMER**

*on behalf of*

**SOUTHWESTERN PUBLIC SERVICE COMPANY**

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## **GLOSSARY OF ACRONYMS AND DEFINED TERMS**

<b><u>Acronym/Defined Term</u></b>	<b><u>Meaning</u></b>
AIILF	All Inclusive Index Less Fuel
Base Period	Calendar Year 2014
BNSF	Burlington Northern Santa Fe Railway Company
CSA	Coal Supply Agreement
Commission	New Mexico Public Regulation Commission
CURE	Citizens United for Rail Equity
FOB	Free on Board
FPPCAC	Fuel and Purchased Power Cost Adjustment Clause
FSO	Fuel Supply Operations
Liberty	Liberty Consulting Group
MBFS	Mileage Based Fuel Surcharge
Operating Companies	Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and SPS
PRB	Powder River Basin
PUCT	Public Utility Commission of Texas
Reporting Period	October 2012 through September 2014

<b><u>Acronym/Defined Term</u></b>	<b><u>Meaning</u></b>
RFP	Request for Proposal
R/VC	Rate to Variable Cost
Savage	Savage Industries
SPS	Southwestern Public Service Company, a New Mexico corporation
SPS/TUCO CSAs	CSAs with TUCO for SPS's Harrington and Tolk coal-fired generation stations
Test Year	Calendar Year 2106
TUCO	TUCO Inc.
UPRR	Union Pacific Railroad
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

## LIST OF ATTACHMENTS

<b><u>Attachment</u></b>	<b><u>Description</u></b>
HCR-1	Benchmark Study ( <i>Filename:</i> HCR-1.pdf)
HCR-2	Excerpts from Liberty Audit ( <i>Filename:</i> HCR-2.pdf)
HCR-3	2013 Xcel Energy Services Audit of TUCO Inc. ( <i>Filename:</i> HCR-3.pdf)
HCR-4	2013 TUCO Audit of Savage Industries ( <i>Filename:</i> HCR-4.pdf)

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of  
H. Craig Romer

**I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

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

2    A.    My name is H. Craig Romer. My business address is 1800 Larimer Street, Suite  
3           1000, Denver, Colorado 80202.

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

5    A.    I am filing testimony on behalf of Southwestern Public Service Company, a New  
6           Mexico Corporation (“SPS”) and wholly-owned electric utility subsidiary of Xcel  
7           Energy Inc. (“Xcel Energy”). Xcel Energy is a registered holding company and  
8           owns several electric and natural gas utility operating companies.<sup>1</sup>

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

10   A.    I am employed by Xcel Energy Services Inc. (“XES”), the service company  
11          subsidiary of Xcel Energy, as Director, Fuel Supply Operations (“FSO”).

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<sup>1</sup> Xcel Energy is the parent company of four wholly-owned electric utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation; and SPS (collectively, “Operating Companies”). Xcel Energy’s natural gas pipeline subsidiary is WestGas InterState, Inc. Xcel Energy also has two transmission-only operating companies, Xcel Energy Southwest Transmission Company, LLC and Xcel Energy Transmission Development Company, LLC, which are regulated by the Federal Energy Regulatory Commission.

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1   **Q.   Please briefly outline your responsibilities as Director, FSO.**

2   A.   I am responsible for supervising, planning, coordinating, and directing the  
3       activities of the FSO department personnel. As Director FSO, I am responsible  
4       for: (1) procuring the coal and solid fuel needs, including supply and  
5       transportation, for the Operating Companies' coal-fueled generating units; (2) the  
6       administration of SPS's coal and coal-related contracts; and (3) coordinating the  
7       FSO department's activities with the trading, purchased power, gas supply, and  
8       energy supply departments.

9   **Q.   Please describe your educational background.**

10  A.   I graduated from the Colorado School of Mines in Golden, Colorado in 2001 with  
11       a Bachelor of Science Degree in Mechanical Engineering.

12  **Q.   Please describe your professional experience.**

13  A.   I was hired as Director, FSO for XES in January 2011. Prior to that time, I held  
14       the position of Manager Transportation Portfolio with XES from June of 2007 to  
15       December of 2010. In this role, I was responsible for the delivery of fuel and  
16       maintaining solid fuel inventories for all of the Operating Companies. These  
17       assignments included, but were not limited to, negotiating transportation and rail

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1 car agreements, communication with logistic providers as well as power plant  
2 personnel, and managing various daily coal yard operations activities.

3 Prior to working for XES, I worked for the Union Pacific Railroad  
4 (“UPRR”) and the Southern Pacific Railroad (before its merger with the UPRR),  
5 holding various positions from December 1994 to June 2007 as noted below:

- 6 • Senior Manager Terminal Operations Denver;
- 7 • Manager Mechanical Maintenance II;
- 8 • Director Transportation Services Denver Service Unit;
- 9 • Manager Terminal Operations – DSLE certified; and
- 10 • Manager Train Operations – Moffat Tunnel, Colorado Springs, and Limon  
11 Subdivisions.

12 These assignments included daily management of railroad operations, track and  
13 rail car maintenance, customer service, hiring and training of trainmen, engineers  
14 and yardmen, and budgetary and financial planning in the region. Prior to these  
15 assignments, I was employed as a brakeman and moved through union ranks of  
16 conductor, foreman, and yardmaster before being promoted to managerial  
17 assignments.



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1   **Q.   Have you attended or taken any special courses or seminars relating to**  
2       **public utilities?**

3   A.   Yes. Over my career, I have taken numerous courses and seminars related  
4       specifically to the public utility industry and related issues, including:

- 5           • Escalation Consultants, Controlling Rail Expenses;
- 6           • Carlson School of Management at the University of Minnesota,
- 7           Negotiation Strategies for Executives;
- 8           • Financial Accounting Institute, Utility Finance and Accounting;
- 9           • American Management Association, Negotiating to Win; and
- 10          • Various National Coal Transportation Association, American Coal
- 11          Council, and Platts coal conferences.

12   **Q.   Have you testified or filed testimony before any regulatory authorities?**

13   A.   Yes. I filed testimony on SPS's behalf before the New Mexico Public Regulation  
14       Commission ("Commission") in SPS's pending fuel continuation case (Case No.  
15       14-00348-UT). I have also filed testimony on SPS's behalf before the Public  
16       Utility Commission of Texas ("PUCT") in Docket Nos. 40824, 42004, and 43695  
17       addressing coal and coal-related costs. I also have testified before the Colorado  
18       Public Utilities Commission.

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**II. ASSIGNMENT AND SUMMARY OF TESTIMONY AND  
RECOMMENDATIONS**

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

2   A.   I will provide an overview of SPS's coal procurements under its long-standing  
3       Coal Supply Agreements ("CSA") with TUCO Inc. ("TUCO") for SPS's  
4       Harrington and Tolk coal-fired generation stations (collectively, "SPS/TUCO  
5       CSAs"). I will discuss the reasonableness of the coal costs SPS seeks to recover  
6       through base fuel, as well as the non-mine and non-freight costs under the  
7       SPS/TUCO CSAs that SPS seeks to recover in base rates in this proceeding. I  
8       will also discuss the known and anticipated adjustments to the coal fuel costs and  
9       the non-mine and non-freight costs between the Base Period (January 1, 2014 –  
10      December 31, 2014) and the Test Year (January 1, 2016 – December 31, 2016).  
11      Finally, I will address the upcoming expiration of the Harrington and Tolk CSAs  
12      in 2016 and 2017, respectively, and the options available to SPS for coal  
13      procurement and coal handling going forward.

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1   **Q.    Are there other SPS witnesses who will be discussing coal-related costs at**  
2       **issue in the case?**

3    A.    Yes. SPS witness David Horneck discusses the projected coal costs (*i.e.*, FOB  
4       mine, freight, and coal losses) SPS seeks to recover in base fuel in this case.  
5       Additionally, SPS witness Evan Evans will discuss SPS's request to reconcile  
6       actual coal costs recovered through SPS's fuel and purchased power cost  
7       adjustment clause ("FPPCAC") for the period October 1, 2014 through March 31,  
8       2015.

9   **Q.    Please summarize your testimony and recommendations.**

10   A.    I support the reasonableness of SPS's total projected cost of coal to be recovered  
11       in the Test Year through both base fuel and in base rates. SPS procures all of its  
12       coal requirements from TUCO under separate, long-term coal supply agreements  
13       for its two coal-fired generation plants. Under this long-standing arrangement  
14       with TUCO, coal is delivered at the generation station bunker at a total delivered  
15       cost.

16               In support of the reasonableness of the total delivered cost of coal, my  
17       testimony provides an overview of the SPS/TUCO CSAs, as well as the contracts  
18       for coal supply, coal transportation, and coal handling services between TUCO

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1 and third-party vendors. Further, my testimony discusses prior Commission  
2 review of the underlying agreements that govern the contract terms and pricing of  
3 the various components of the Test Year cost of coal sought to be recovered in  
4 this case, as well as SPS's coal purchasing policies and procedures, which ensure  
5 that all coal costs passed on to SPS customers are reasonable and necessary.

6 For the Test Year, the projected average cost of coal (\$/MMBtu)  
7 recovered through base fuel is expected to increase to \$1.83/MMBtu, which is  
8 approximately 4% more than the average cost incurred during the Base Period  
9 (\$1.76/MMBtu). For SPS's non-mine and non-freight coal costs recovered  
10 through base rates, SPS expects to incur \$37,268,487 (total company) in non-mine  
11 and non-freight coal costs in the Test Year. This total company amount is  
12 \$1,085,127 less than the amount incurred during the Base Period. The decrease is  
13 primarily due to a reduction in the total margin costs under the SPS/TUCO CSAs.

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**III. OVERVIEW OF TUCO AGREEMENTS RELATED TO  
SPS'S COAL PROCUREMENTS**

1   **Q.   How does SPS procure its coal requirements?**

2   A.   SPS procures coal from TUCO for SPS's two coal-fueled electric generating  
3       facilities, Harrington and Tolk Stations, under a separate, long-term contract for  
4       each station (individually referred to as the SPS/TUCO-Harrington CSA and the  
5       SPS/TUCO-Tolk CSA). The SPS/TUCO CSAs were originally executed on April  
6       30, 1979, and later restated to include all amendments through December 31,  
7       1994. There have been additional amendments to the CSAs since December 31,  
8       1994, with the most recent being executed in December of 2010. The  
9       SPS/TUCO-Harrington CSA terminates on December 31, 2016, and the  
10      SPS/TUCO-Tolk CSA terminates one year later on December 31, 2017.

11               Under the SPS/TUCO CSAs, TUCO arranges for the purchase, receipt,  
12      transportation, unloading, handling, crushing, weighing, and delivery of coal to  
13      the bunkers to meet SPS's requirements. TUCO is responsible for negotiating  
14      and administering contracts with coal suppliers, transporters, and handlers. The  
15      FSO Department's responsibilities on behalf of SPS include determining SPS's  
16      coal needs, administering the CSAs, and overseeing and reviewing TUCO's

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1 procurement of coal and transportation services and TUCO's administration of its  
2 subcontracts.

3 **Q. How is SPS's cost of coal determined under the SPS/TUCO CSAs?**

4 A. SPS purchases coal from TUCO for a delivered price at the bunkers, based on the  
5 sum of TUCO's: (1) Free on Board ("FOB") mine cost of coal; (2) cost of  
6 transportation from the mine to the unloading facilities; (3) costs incurred for  
7 furnishing railcars and for handling, storing, crushing, processing, weighing, and  
8 delivering coal to SPS's bunkers; (4) assessments and taxes (except federal and  
9 state income taxes); (5) cost of financing coal inventories; (6) cost of coal losses;  
10 and (7) margin. Of these seven cost categories, only FOB mine cost of coal  
11 (item 1), the cost of transportation from the mine to the unloading facility  
12 (item 2), and the cost of coal losses (item 6) are included in SPS's coal fuel  
13 expense recovered through base fuel and the FPPCAC. The other non-mine and  
14 non-freight costs are recovered through SPS's base rates.

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1   **Q.   How will TUCO obtain coal to satisfy SPS's coal requirements during the**  
2       **Test Year?**

3   A.   TUCO owns no coal reserves, but instead contracts with coal suppliers to satisfy  
4       SPS's needs. TUCO also provides coal transportation services under long-term  
5       transportation agreements with the Burlington Northern Santa Fe Railway  
6       Company ("BNSF") to serve its coal transportation needs from the Powder River  
7       Basin ("PRB") and coal handling services under long-term coal service  
8       agreements with Savage Industries ("Savage").

9   **Q.   Please summarize the coal contracts that TUCO will use to supply coal to**  
10       **SPS during the Test Year.**

11   A.   TUCO will purchase coal for SPS under the following three existing contracts:  
12       **ARCH Coal Sales Company Inc. MCSA.** This Master Coal Supply Agreement  
13       was entered into on December 31, 2010 and is an evergreen agreement where coal  
14       is purchased under Confirmation Notices with specific pricing, quantities, term,  
15       and quality. Purchases can be used for either Harrington or Tolk Station's coal  
16       needs.

17       **Peabody COALSALES LLC MCSA.** This Master Coal Supply Agreement was  
18       entered into on December 15, 2010 and is an evergreen agreement where coal is  
19       purchased under Confirmation Notices with specific pricing, quantities, term, and  
20       quality. Purchases can be used for either Harrington or Tolk Station's coal needs.

21       **Cloud Peak Energy Resource LLC MCSA.** This Master Coal Supply  
22       Agreement was entered into on November 1, 2010 and is an evergreen agreement  
23       where coal is purchased under Confirmation Notices with specific pricing,

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1 quantities, term, and quality. Purchases can be used for either Harrington or Tolk  
2 Station's coal needs.

3 TUCO executes annual coal purchases using a competitive bidding  
4 process reflecting SPS's approach to obtain the lowest cost for fuel purchases  
5 layering in purchases and tonnages to fill fuel requirements. This approach relies  
6 upon various interrelated considerations, including: fuel quality; supply  
7 reliability; supply diversity; the benefits of establishing a ladder (portfolio) of fuel  
8 contracts that expire at different times; the benefit of obtaining fuel from a variety  
9 of mines; and the benefit of market competition from prospective vendors  
10 lowering overall coal costs.

11 At any given time, TUCO attempts to have under contract the following  
12 approximate percentages of SPS's coal needs: 100% of next year's need, 66% of  
13 the second year's need, and 30% of the third year's need. Each year, TUCO  
14 issues a new Request for Proposal ("RFP") seeking bids from each of the three  
15 potential suppliers for several future years. TUCO evaluates the bids and then  
16 begins to firm-up the supply for the next three years by issuing Confirmation  
17 Notices. TUCO is not required to accept a bid from any particular supplier and  
18 attempts to choose among the quantities and prices offered so as to produce the



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1 lowest total coal cost. This process allows TUCO and SPS to take advantage of  
2 changes in market conditions over time.

3 **Q. Please summarize the coal transportation contracts between TUCO and**  
4 **BNSF that will be in place during the Test Year.**

5 A. Coal transportation services from the PRB will be provided under long-term  
6 transportation agreements with the BNSF. Unlike the pre-2013 coal  
7 transportation agreements, the current agreements are governed by tariffs rather  
8 than specific contract terms. The tariff addresses multiple items, including but not  
9 limited to, coal dust mitigation, load profiles, loading and unloading requirements,  
10 and a mileage-based diesel fuel surcharge. The railroads moved to common  
11 carrier certificates, governed by tariffs, rather than specific contracts to bring  
12 fairness and consistency across the commodity group(s) for all shippers.

13 The current rail transportation agreements with BNSF began on January 1,  
14 2013 for both for Harrington Station and Tolk Station. The agreement for  
15 Harrington Station expires on December 31, 2016, and the agreement for Tolk  
16 Station expires on December 31, 2017.

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- 1   **Q.   Please summarize the coal handling agreement(s) between TUCO and**  
2       **Savage.**
- 3   A.   The coal handling agreements between TUCO and Savage began when Savage  
4       purchased the coal handling systems from Wheelabrator Energy Leasing  
5       Company at Tolk Station, and Swindell-Dressler Leasing Company at Harrington  
6       Station in May 2000. TUCO contracts with Savage for furnishing railcars,  
7       unloading, handling, storing, crushing, processing, weighing, and delivering coal  
8       to SPS's bunkers. In May of each year, Savage provides one-year (for the  
9       upcoming year) and five-year preliminary budget estimates for its anticipated  
10      expenses to perform the coal-handling duties for TUCO, with the final budgets  
11      due in December. The budget items include, but are not limited to, labor and  
12      benefits, equipment and facility maintenance, equipment leases, fuel, rail car  
13      leases and maintenance, service fee, and administrative expenses. The Savage  
14      Coal Service Agreements were amended in September of 2008 to extend the  
15      terms of the agreement(s) to December 31, 2016 for Harrington Station, and to  
16      December 31, 2017 for Tolk Station.

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**IV. REASONABLENESS OF COAL AND TRANSPORTATION COSTS  
RECOVERED THROUGH SPS'S BASE FUEL AND FPPCAC**

1   **Q.     Please explain what topic you will discuss in this section of your testimony.**

2   A.     I will discuss the Test Year coal fuel costs SPS seeks to recover in base fuel and  
3           adjusted through the FPPCAC, as well as the reasonableness of these costs.

4   **Q.     What components of the total delivered cost of coal are recovered through**  
5           **base fuel and the FPPCAC?**

6   A.     Of the seven cost categories discussed in the previous section, only FOB mine  
7           cost of coal (item 1), the cost of transportation from the mine to the unloading  
8           facility (item 2), and the cost of coal losses (item 6) are included in SPS's coal  
9           fuel expense recovered through base fuel and the FPPCAC.

10  **Q.     What is the basis for the Test Year FOB mine cost?**

11  A.     The estimated cost of coal for the Test Year is an average weighted cost of: (1)  
12           known contracted coal, quantities, and price; and (2) an open position, quantities,  
13           and price. The open position is determined by subtracting the known contracted  
14           quantities from the burn forecast for the Test Year. The price for the open  
15           position coal is determined by taking an average of three price forecasts for the  
16           Test Year. The average weighted cost for the Test Year is determined by inputs

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1 of the contracted coal quantities and prices and the open position estimated  
2 quantities and prices and converted to \$/MMBtu.

3 **Q. What is the basis for the Test Year coal transportation costs?**

4 A. Coal transportation costs are based on long-term transportation agreements  
5 between TUCO and the BNSF for Harrington and Tolk Stations. The estimated  
6 Test Year transportation cost is calculated by escalating the Base Year  
7 transportation rate by the estimated All Inclusive Index Less Fuel (“AIIIF”) to  
8 the Test Year and adding the applicable Mileage Based Fuel Surcharge (“MBFS”) for the plant. An average weighted transportation cost is determined by applying  
9 the estimated burn forecast quantities by plant to the applicable transportation  
10 components, estimated rail rate, and estimated MBFS and converted to \$/MMBtu.

12 **Q. Are the coal transportation costs reasonable?**

13 A. Yes. A long-term transportation agreement between the BNSF and TUCO was  
14 set to expire on December 31, 2012 prompting TUCO to issue an RFP to the  
15 UPRR and the BNSF to provide service to Tolk and Harrington Stations.  
16 Following receipt of the responses, TUCO engaged L.E. Peabody and Associates  
17 to review the proposals for rate reasonableness as defined by the Federal Surface  
18 Transportation Board. The rate reasonableness test applies only to captive

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1 shippers, Tolk Station in this case, and the rate must be below a threshold set at  
2 180% of the Rate to Variable Cost (“R/VC”) ratio. BNSF’s proposed rate for  
3 Tolk Station was below the threshold. UPRR declined to bid as it does not have a  
4 track to the Tolk facility.

5 For Harrington Station, TUCO negotiated with both UPRR and BNSF on  
6 the terms and conditions and rail rates, with BNSF eventually becoming the  
7 successful bidder. As a check, TUCO reviewed the rate for Harrington and  
8 concluded that it also was below the 180% R/VC ratio used by the Federal  
9 Surface Transportation Board as a reasonableness test.

10 **Q. Please explain how the coal loss factors under the SPS/TUCO CSAs are**  
11 **calculated?**

12 A. The Coal Loss Factor is calculated by multiplying the sum of the FOB mine costs  
13 and the transportation costs by 1% at Harrington and 0.5% at Tolk. The Coal  
14 Loss Factors have periodically been adjusted downward through Letter of  
15 Agreements amending the SPS/TUCO CSAs, the most recent of which was  
16 executed in September 2007, setting the above percentages. The funds from the  
17 Coal Loss Factor, held in the “Loss Reserve Account,” are trued up following the

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1 coal inventory survey in September of each year either as a refund to SPS or as a  
2 payment to TUCO.

3 **Q. What is the projected average cost of coal (\$/MMBtu) included in base fuel**  
4 **for the Test Year?**

5 A. As shown on Schedule H-2, the projected average cost of coal for the 2016 Test  
6 Year is \$1.83/MMBtu. This amount is 3.98 percent higher than the \$1.76/MMBtu  
7 average cost of coal incurred in the Base Period.

8 **Q. Please explain the driver(s) for the increase in the average cost of coal for the**  
9 **Test Year.**

10 A. The increase in the average cost of coal is driven by: (1) an expected increase in  
11 the rail rate, which is tied to the AAILF index; (2) an anticipated increase to On-  
12 Highway diesel prices, which drive the MBFS on the rail rate; and (3) an increase  
13 in the contracted coal price.

14 **Q. Is SPS's projected average cost of coal for the Test Year reasonable?**

15 A. Yes. SPS and TUCO have taken steps to reduce the cost of coal including: (1)  
16 amending coal supply agreements to lower annual increases and base costs; (2)  
17 lowering the coal loss factor; (3) changing the way in which coal is procured to  
18 take advantage of market dips; and (4) tying certain volatile components to

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1        indexes to avoid periodic price spikes. These efforts are demonstrated in the  
2        benchmark analysis provided in Attachment HCR-1, which shows that SPS's  
3        average total cost of coal (*i.e.*, FOB mine, transportation cost, and coal losses) has  
4        been in the Lowest Cost Quartile, when compared to the average cost for other  
5        major utilities for eight out of the last nine years. SPS expects its position to  
6        continue to be in the Lowest Cost Quartile, in the Test Year.

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**V. REASONABLENESS OF NON-MINE AND NON-FREIGHT COSTS INCLUDED IN SPS'S BASE RATES**

1   **Q.    Please explain what topic you will discuss in this section of your testimony.**

2    A.    I will discuss the Test Year non-mine and non-freight costs that are assessed by  
3           TUCO and included in SPS's total delivered cost of coal under the SPS/TUCO  
4           CSAs that SPS seeks to recover in base rates in this proceeding, as well as the  
5           reasonableness of these costs.

6   **Q.    Please summarize the components of SPS's delivered cost of coal that are**  
7           **recovered through base rates.**

8    A.    The components of TUCO's delivered cost of coal that are recovered through  
9           base rates include costs associated with: (1) furnishing railcars and costs  
10          associated with the railcars, unloading, storing, crushing, processing, weighing,  
11          and delivering coal to SPS's bunkers (*i.e.*, coal handling); (2) assessments and  
12          taxes (except federal and state income taxes); (3) cost of financing coal  
13          inventories; and (4) margin costs. Collectively, these costs are referred to as non-  
14          mine and non-freight costs.



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1   **Q.   Please explain the purpose of the margin under the SPS/TUCO CSAs.**

2   A.   The margin, as set forth under the September 1996 Margin Amendment, is the  
3       mechanism by which TUCO recovers costs incurred for executing its  
4       responsibilities and obligations under the SPS/TUCO CSAs in a prudent and  
5       diligent manner. The margin includes costs of NexGen Coal Services, Ltd.'s  
6       (TUCO's parent company) initial investment when it purchased all of TUCO's  
7       stock from Cabot Corporation in 1996, associated taxes, earnings, and a return on  
8       the initial investment.

9   **Q.   What is the total cost of SPS's non-mine and non-freight coal costs in the**  
10       **Test Year?**

11   A.   For the Test Year, SPS estimates these costs to be \$37,268,487 (total company).  
12       These costs are included in SPS's cost of service presented by SPS witness Arthur  
13       Freitas.

14   **Q.   How does the total amount of non-mine and non-freight coal costs in the Test**  
15       **Year compare to the Base Period?**

16   A.   During the Base Period, SPS incurred \$38,353,614 (total company) in non-mine  
17       and non-freight coal costs, which is \$1,085,127 (total company) more than the  
18       estimated Test Year.

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1   **Q.   Why are the Test Year non-mine and non-freight coal costs lower than the**  
2       **costs incurred in the Base Period?**

3   A.   There are a number of factors that contribute to the decrease in the Test Year non-  
4       mine and non-freight coal costs. The primary driver for the decrease is the  
5       reduction in the total margin costs under the SPS/TUCO CSAs due to the Seller's  
6       Intangible component of the margin that will end in September 2016.

7               Additionally, SPS expects coal handling volumes and costs to increase  
8       slightly in the Test Year over the Base Period because of the expectation that rail  
9       operations will return to normal historic levels by the Test Year. The BNSF  
10      experienced severe service disruptions in 2014 due to the "polar vortex,"  
11      increased customer demand in all commodity sectors, increased track  
12      maintenance activities, and capital expansion initiatives which all resulted in  
13      lower deliveries to Tolk and Harrington Stations. SPS expects service to return to  
14      normal levels as the BNSF has made significant capital expenditures in 2014 and  
15      2015 to address these issues.

16             Finally, the Administrative Fee and the Operating Expenses components  
17      of the margin will also increase slightly based on annual escalation factors under

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1 SPS/TUCO CSAs. These costs are a relatively small part of the total non-mine  
2 and non-freight costs sought to be recovered in this case.

3 **Q. Have the SPS/TUCO CSAs and the associated costs been reviewed by the**  
4 **Commission in previous regulatory proceedings?**

5 A. Yes. The components of the delivered cost of coal under the SPS/TUCO CSAs  
6 have been previously reviewed and approved by both this Commission and the  
7 PUCT in numerous fuel-related and base rate cases.

8 Prior to SPS's 2007 rate case, SPS's non-mine and non-freight costs, such  
9 as coal handling costs, TUCO margin, and taxes other than federal and state  
10 income taxes, had been recovered as eligible fuel expense and included in base  
11 fuel and the computation of the FPPCAC. In Case No. 07-00319-UT, SPS  
12 proposed a change to the rate treatment of the non-mine and non-freight costs  
13 under the CSAs, requesting that these costs be recovered through base rates going  
14 forward. In support of the amount proposed to be moved to base rates, SPS  
15 explained that the TUCO contracts for the coal handling services and budgets for  
16 handling costs are reviewed for necessity and reasonableness and approved by  
17 both TUCO and SPS personnel. Further, TUCO's margin and the taxes and

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1 assessments component of the coal costs can be reasonably estimated using  
2 contract terms and historical amounts paid for these components.<sup>2</sup>

3 SPS's proposal to move the non-mine and non-freight costs to base rates  
4 was not opposed by any party, and Staff expressly supported the request,  
5 concluding that SPS's proposal was consistent with Staff's understanding of the  
6 purpose of Rule 550 - that the FPPCAC should be used to recover volatile fuel  
7 and purchased power costs and not fuel or fuel-related costs that are relatively  
8 stable.<sup>3</sup>

9 Since 2007, these costs have been subject to Commission review in each  
10 subsequent base rate proceeding (*i.e.*, Case Nos. 08-00354-UT, 10-00395-UT, and  
11 12-00350-UT) as part of SPS's revenue requirement analysis. As in Case No.  
12 07-00319-UT, neither Staff nor any intervenor challenged or raised issue with  
13 SPS's long-standing CSA agreements with TUCO or the associated costs in any  
14 of these most recent SPS base rate cases.

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<sup>2</sup> See Case No. 07-00319-UT, *In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Electric Rates Pursuant to Advice Notice Nos. 208 and 209 and all Associated Approvals*, SPS Exhibit 3 (Hudson Direct) at 37-38.

<sup>3</sup> See Case No. 07-00319-UT, Staff Exhibit 20 (Gunter Direct) at 32-33.

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- 1   **Q.   Were the SPS-TUCO CSAs reviewed as part of the Liberty Consulting**  
2       **Group (“Liberty”) Audit ordered by the Commission in Case No.**  
3       **08-00354-UT?**
- 4   A.   Yes. In Case No. 09-00351-UT,<sup>4</sup> Liberty provided the Commission with a  
5       comprehensive and detailed audit of SPS’s fuel, purchased power, and fuel-  
6       related costs, including the non-mine and non-freight costs incurred under the  
7       SPS/TUCO CSAs, for the period July 14, 2009 through July 13, 2010. Liberty’s  
8       review also addressed TUCO’s role in managing and fulfilling SPS’s coal fuel  
9       requirements, as well as SPS’s past efforts to reduce the overall cost to its  
10      customers under the terms of the CSAs. In its Final Report, Liberty concluded  
11      that no changes to either the arrangement or the SPS/TUCO CSAs was necessary,  
12      and that SPS’s delivered coal costs over the review period (*i.e.*, 2009-2010) were  
13      reasonable, and that SPS had acted appropriately with respect to the SPS/TUCO  
14      CSAs. Further, while Liberty acknowledged that the SPS/TUCO arrangement  
15      was “unusual,” it did not indicate the need for any further review of that  
16      arrangement or the terms under the SPS/TUCO CSAs. Finally, since completion

---

<sup>4</sup> *In the Matter of the Audit and Prudence Review of Southwestern Public Service Company’s Fuel and Purchased Power Costs*, Case No. 09-00351-UT, Final Order Closing Docket (Mar. 12, 2014).

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1 of the Liberty Audit, there have been no substantive amendments to any of the  
2 coal supply, coal transportation, or coal handling agreements under the  
3 SPS/TUCO CSAs. A copy of the relevant pages from the Final Report that  
4 address SPS's coal activities is provided as Attachment HCR-2.

5 **Q. How does SPS assure the reasonableness of the costs incurred by TUCO for**  
6 **coal handling services, for assessments and taxes, for financing coal**  
7 **inventories, and for the margin under the SPS/TUCO CSAs?**

8 A. SPS engages in several activities to ensure that all costs to be passed on to SPS  
9 are reasonable and necessary. First, SPS actively monitors TUCO's contracting  
10 activities that could affect SPS's costs. SPS has frequent discussions with TUCO  
11 before execution of any contracts that would affect these costs. Through these  
12 discussions, SPS ensures that the overall bid solicitation is conducted so that  
13 TUCO will receive the most competitive bids to meet SPS's needs.

14 During any contract evaluation process, SPS reviews TUCO's  
15 methodologies and conclusions to ensure that the lowest reasonable cost supplier  
16 or suppliers are selected. Those supplier costs are reviewed within the context of  
17 the current market conditions and with the best information available at the time.  
18 SPS also reviews and provides comments to TUCO on draft agreements, thus

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1 ensuring the most advantageous and flexible arrangements are made. SPS also  
2 works with its generation plant engineers to ensure that any operational concerns  
3 can be addressed in the agreements' terms.

4 Additionally, SPS stays informed of various discussions and negotiations  
5 between TUCO and its contractors. As a result, SPS ensures that the terms and  
6 conditions TUCO ultimately achieves are the result of arm's-length negotiations  
7 and are in the best interests of SPS.

8 Finally, SPS engages in contract administration activities, which are  
9 further described in the next answer, to ensure it is billed correctly under the  
10 various contracts.

11 All of these efforts help ensure that SPS's non-mine and non-freight costs  
12 recovered through base rates are reasonable and necessary expenses.

13 **Q. Please elaborate on the contract administration activities you just mentioned.**

14 A. SPS ensures the accuracy and reasonableness of TUCO's charges for delivered  
15 coal by checking invoices and conducting annual audits of TUCO. This activity  
16 includes not only the coal acquisition and transportation agreements, but also the  
17 other contracts that affect coal costs included in the cost of service. For example,  
18 SPS performs calculations to ensure the accuracy of finance charges and TUCO's

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1 margins. The other cost components in TUCO's invoices are also reviewed to  
2 ensure both the contractual validity of each component and the accuracy of the  
3 calculation of each cost category. A copy of SPS's most recent audit of TUCO is  
4 provided as Attachment HCR-3.

5 **Q. Are there specific activities that TUCO or SPS, or both, pursue to assure**  
6 **themselves that the costs incurred for coal handling costs are reasonable and**  
7 **necessary?**

8 A. Yes. TUCO and its coal handling contractor, Savage, engage in monthly  
9 operational meetings to discuss relevant coal handling issues and coal delivery  
10 developments for Tolk and Harrington Stations. SPS coal supply and FSO  
11 personnel also attend these monthly meetings. TUCO's personnel monitor  
12 Savage's costs relative to the amounts budgeted for coal handling activities.  
13 TUCO and SPS personnel review Savage's monthly coal handling invoices for  
14 accuracy and conformance with approved activities and identified budget  
15 expenditures through the annual audit of the TUCO contract. Also, TUCO  
16 employs an independent accounting firm to examine Savage's performance under  
17 its contract with TUCO, in accordance with the standards established by the



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1 American Institute of Certified Public Accountants. Please refer to Attachment  
2 HCR-4 for a copy of the most recent audit of Savage.

3 **Q. Has TUCO recently pursued any actions to enhance safety or operational**  
4 **efficiencies at the Tolk and Harrington Stations?**

5 A. Yes. Several projects have been authorized by TUCO for Savage to undertake at  
6 Tolk and Harrington Stations to improve safety and efficiency, and to lower costs.  
7 The costs of these projects are included in the coal handling costs included in  
8 SPS's base rates. Following is a brief description of the projects:

9 **Tolk Station**

10 **2014:**

- 11 • Handrail Additions on Crusher Motor Control Center roof;
- 12 • Emergency Equipment Startup Controls in Motor Control Center;
- 13 • Redesigned stairway at magnets;
- 14 • Rotary Car Dumper Lighting upgrade;
- 15 • 6A and 6B Belt Lighting upgrade; and
- 16 • 3A Hoist Replacement.

17 **2015:**

- 18 • Hoist replacements;
- 19 • Local area network replacement;
- 20 • Conspec system upgrade (continued);
- 21 • Caterpillar D10-fire system installation;
- 22 • Dust collector bag replacement;
- 23 • Tunnel lighting upgrade;
- 24 • Sump line replacement;

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- 5A belt replacement;
- RCD positioner base repair and positioner drive replacement;
- RCD MCC roof replacement;
- 3A conveyor belt replacement; and
- Caterpillar 992 addition.

**2016:**

- RCD chute replacement; and
- RCD belt replacement.

**Harrington Station**

**2014:**

- Installed Railcar Camera Monitoring System;
- Belt Replacements (Belts 500, 510, 540, 600, 610);
- Crusher/Crusher Motor Rebuild; and
- Unit 3 Heater Replacement.

**2015:**

- PLC Upgrade;
- Coal pile sealant (dust control);
- SPM upgrades;
- Crusher building improvements (corroded steel replacement, removal of voids in wall space – dust, replacing roof, replaced diamond plate flooring with grating);
- Secured asbestos coating in Tripper Decks; and
- Office repairs (roof, ceiling tiles, shower, HVAC, windows, mold removal, etc.);
- Dust collector bag replacement;
- Caterpillar D10 addition;
- Caterpillar 988 addition; and
- Perimeter fence repair.

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1  
2  
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4

**2016:**

- Thaw shed repairs and insulation;
- Upgrade fuel station; and
- Upgrade wash pad facility and maintenance area.

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**VI. SPS'S COAL PROCUREMENT AND COAL HANDLING  
ARRANGEMENTS POST TEST YEAR**

1   **Q.    The SPS/TUCO-Harrington and SPS/TUCO-Tolk CSAs are set to terminate**  
2       **at the end of 2016 and 2017, respectively. Has SPS made any decisions**  
3       **regarding its plans for coal procurement and coal handling following the**  
4       **expiration of these agreements?**

5    A.   No, not at this time. SPS is aware of the expiration of the SPS/TUCO CSAs and  
6       is considering a number of options to meet its coal procurement and coal handling  
7       requirements at both Harrington and Tolk Stations.

8   **Q.    What options are SPS considering for its coal procurement and coal handling**  
9       **requirements going forward?**

10   A.   When considering the various options, SPS is focused on costs to customers,  
11       reliability of fuel supply, flexibility to address changing environmental and  
12       regulatory conditions, and operating the fuel handling system in a reasonable and  
13       prudent fashion. The analysis will compare the current roles of TUCO and  
14       Savage in the coal delivery process with SPS assuming, to some degree, those  
15       roles and responsibilities in-house. The options that are currently being evaluated  
16       include on one end of the spectrum SPS assuming all coal handling

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1 responsibilities in-house and on the other end of the spectrum having a third party  
2 manage the coal procurement and coal handling activities for SPS. One option  
3 that is being considered is extending the SPS/TUCO CSA at Harrington to expire  
4 at the end of 2017 rather than 2016 to match the SPS/TUCO-Tolk CSA's  
5 expiration. One benefit of this option is that it allows SPS to defer adding  
6 additional employees to manage just the coal activities at Harrington Station, as  
7 TUCO would continue in its current role procuring and managing coal activities  
8 for Tolk Station.

9 Any analysis and evaluation will focus on determining the least cost  
10 solution with the greatest benefit for the customers. SPS has begun preliminary  
11 analysis of the aforementioned spectrum of options, but has not yet made a final  
12 determination.

13 **Q. Will SPS's decision regarding its coal procurement practices and coal**  
14 **handling requirements following the Test Year be subject to review by the**  
15 **Commission?**

16 **A.** Yes. The costs incurred by SPS to meet its future coal fuel supply under any  
17 contract(s), as well as other arrangements to meet its coal procurement

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1 requirements will be subject to Commission review in the base rate and FPPCAC  
2 processes.

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**VII. CONCLUSION**

1   **Q.**    Was Attachment HCR-1 prepared by you or under your direct supervision?

2   A.    Yes.

3   **Q.**    Are Attachments HCR-2 through HCR-4 true and correct copies of the  
4           documents referenced in your testimony?

5   A.    Yes.

6   **Q.**    Does this conclude your pre-filed direct testimony?

7   A.    Yes.

**VERIFICATION**

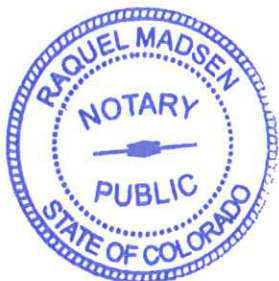
STATE OF COLORADO                    )  
  ) ss.  
COUNTY OF DENVER                    )


H. CRAIG ROMER, first being sworn on his oath, states:

I am the witness identified in the preceding direct 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.

  
\_\_\_\_\_  
H. CRAIG ROMER

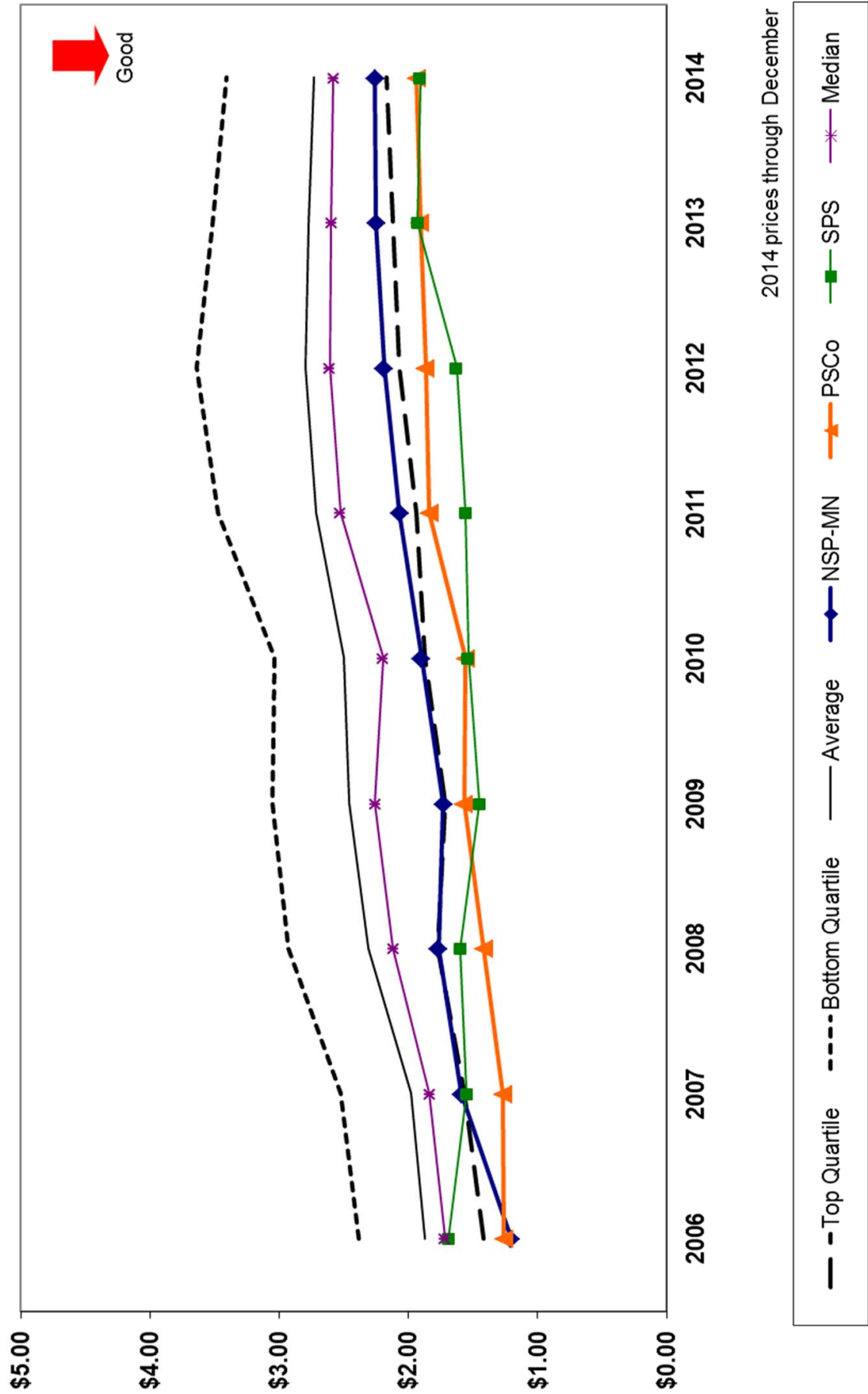
SUBSCRIBED AND SWORN TO before me this 20<sup>th</sup> day of May, 2015.



  
\_\_\_\_\_  
Notary Public, State of Colorado  
My Commission Expires: 6-2-15



## Comparison to Peer Operating Companies Coal Delivered Price per MMBtu Actuals



**Final Report  
SPS Fuel, Purchased Power,  
Generation, and  
Fuel Clause Review**

***Public Version***  
***CONFIDENTIAL MATERIAL IS REDACTED***

**Presented to the:**

**New Mexico  
Public Regulation Commission**

**By:**



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March 15, 2011

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## **I. Introduction and Executive Summary**

### **A. Background**

The Liberty Consulting Group (“Liberty”) conducted an independent audit and prudence review of the fuel and purchased power cost adjustment clause (“fuel clause”) and related documentation of the electric business operations of Southwestern Public Service Company (“SPS”) and conducted a prudence examination of transactions made under SPS’s renewable energy credit tracker. Liberty’s work covered the period July 14, 2009 through July 13, 2010. The activities performed by Liberty were contracted for by the Chief of Staff of the New Mexico Public Regulation Commission (“the Commission” or “NMPRC”) and was performed at the direction of his designee. According to the NMPRC’s Final Order in Case No. 08-00354-UT, SPS was required to pay the costs of performing the audit, prudence review and prudence examination and SPS was granted the right to treat all amounts it pays for such services as a regulatory asset and recover such amounts from its ratepayers through rates established in a future rate proceeding.

SPS, an electric utility company, operates as a wholly-owned subsidiary of Xcel Energy Inc. (“Xcel Energy”). Xcel Energy, a Minnesota corporation, is a registered holding company under the federal Public Utility Holding Company Act. Xcel Energy owns four electric and natural gas utility operating companies and a regulated natural gas pipeline company: SPS (a New Mexico corporation), Northern States Power Company (a Minnesota corporation), Northern States Power Company (a Wisconsin corporation), Public Service Company of Colorado, (“PSCo”) (a Colorado corporation), and WestGas Interstate, Inc. (a Colorado corporation). Xcel Energy also owns a centralized service company, Xcel Energy Services Inc. (“XES”), which provides shared or common administrative and management services and also some technical services to the utility operating companies and affiliates in the Xcel Energy holding company system of companies. Xcel Energy’s subsidiaries engage almost exclusively in the electric and natural gas utility business in portions of eight states: New Mexico; Colorado; Michigan; Minnesota; North Dakota; South Dakota; Texas; and Wisconsin. In terms of customers, Xcel Energy is one of the largest combination electric and natural gas distribution utility holding companies in the nation. It has approximately 3.38 million retail electric customers and approximately 1.87 million retail natural gas customers.

Xcel Energy was created in 2000 when Northern States Power Company merged with New Century Energies, Inc., (“NCE”). NCE came into existence in 1997 when SPS merged with PSCo. Before its merger with PSCo, SPS had been a stand-alone electric utility company.

SPS serves approximately 114,000 retail electric customers in eastern and southern New Mexico. SPS serves the following cities in New Mexico: Artesia, Carlsbad, Clovis, Dexter, Eunice, Hagerman, Hobbs, Jal, Lake Arthur, Loving, Malaga, Monument, Otis, Portales, Roswell, Texico, Tucumcari, and White City. The NMPRC regulates SPS’s retail operations in New Mexico.

SPS also serves retail electric customers in the Panhandle and South Plains of Texas. The Texas Public Utility Commission regulates SPS's retail operations in Texas.

SPS serves most of its New Mexico and Texas cities and towns within its service area, but many areas outside of those municipalities are served by rural electric cooperatives. System-wide, SPS's transmission and distribution system consists of 6,677 miles of transmission lines and 15,783 miles of distribution lines. In New Mexico, SPS operates 4,202 miles of the distribution lines.

In addition to retail electric service, SPS engages in wholesale power sales and operates an interstate electric transmission system. The Federal Energy Regulatory Commission regulates SPS's wholesale sales and transmission rates.

SPS's transmission system and service area are uniquely located relative to the electrical grids of North America. SPS is a member of the Southwest Power Pool ("SPP") Regional Transmission Organization. SPS is, however, located in the far southwestern corner of the SPP and the eastern grid, and is bordered to the west and south by the Western Electric Coordinating Council ("WECC") and to the southeast and south by the Electric Reliability Council of Texas ("ERCOT"). SPS operates adjacent to the ERCOT grid, but SPS has no direct interconnections with ERCOT transmission owners.

SPS is connected to the eastern grid through six synchronous interties in the SPP. The three primary interconnections with the SPP are: a 230 kilovolt ("kV") transmission power line to Elk City, Oklahoma (Public Service Company of Oklahoma); a 345 kV transmission power line to Oklaunion, Texas (AEP Texas North Company); and a 345 kV transmission power line to Holcomb, Kansas (Sunflower Electric Power Corporation). The other three interties are at 115kV. SPS also is connected to the western grid through the three high-voltage direct-current back-to-back converters, or HVDC ties at: the Eddy County HVDC tie located near Artesia, New Mexico connected to Public Service Company of New Mexico ("PNM") and El Paso Electric Company; the Blackwater Draw HVDC tie located near Clovis, New Mexico (connected to PNM); and the Lamar HVDC tie in Prowers County, Colorado (connected to PSCo).

SPS currently has an installed net generating capability of 4,266 MW, with 50 percent of this capacity in coal-fired plants and the remainder in plants using other fuels, primarily natural gas. Chapter Six of this report provides a complete listing of these generating units. SPS purchases all of its fuel for its generating units from unaffiliated third-party suppliers.

## **B. Project Objectives and Scope**

The objectives of Liberty's audit and prudence review were to address whether SPS's fuel and purchase power policies and practices were consistent with generally accepted practices in the electric utility industry, to assure that electric power has been generated and delivered at the lowest reasonable cost, and to verify that such costs are accurately recovered and recorded. In addition, the audit and prudence review was to include examination of the prudence of SPS's transactions under the Renewable Energy Certificate (REC) Tracker conditionally approved by the Commission in NMPRC Case No. 08-00354-UT.

In accordance with the Request for Proposal (“RFP”) for this project, the overall scope included the following:

- Coal costs including transportation, and other related costs
- Gas for electric power production
- Purchased power expense and sales for resale
- Line losses
- Fuel clause computations
- SPS’s fuel clause related policies, procedures, rules, cost allocations and manuals, and other guiding documentation.

In accordance with the RFP for this project, included in the tasks for the audit was examination of the following, and to ensure that:

- SPS’s calculation of the fuel clause is accurate and the costs included in the fuel clause include only allowed costs
- SPS’s current accounting and internal control policies, management practices, and operational procedures as they pertain to SPS’ administration of the fuel clause are effective and meet related requirements.

In addition, in accordance with the RFP for this project, included in the tasks for the prudence review were a review and assessment of current practices, with recommendations for remedial actions where appropriate, in the following areas:

- Coal Costs and Plant Operations
- Gas for Electric Power Production
- Purchased Power Expense and Sales for Resale
- Line Losses
- Fuel Clause Computations
- SPS’s Fuel Clause Related Policies, Procedures, Rules, Cost Allocations and Manuals, other guiding documentation.

### **C. Audit Work Structure**

Liberty carried out the audit and prudence review for this project as part of an integrated set of steps and processes. Liberty divided the work scope as required by the RFP into the following eleven functionally based task areas, and assigned a team member to each of these Task Areas who has specific expertise in the area.

- Task Area One: Goals, Strategies, Organization, Policies, Procedures
- Task Area Two: TUCO Coal Contract and Transportation Reasonableness
- Task Area Three: Benchmarking of Coal Prices
- Task Area Four: Power Plant Operation
- Task Area Five: Natural Gas and Oil for Electricity Generation
- Task Area Six: Purchase Power Expense and Sales for Resale
- Task Area Seven: Line Losses
- Task Area Eight: Cost Allocation and Assignment
- Task Area Nine: Fuel Clause Computation



- Task Area Ten: Evaluation of Fuel Clause Process and Regulations
- Task Area Eleven: REC Tracker.

Liberty's report for this project combined the above Task Areas into specific report chapters, as follows:

- Chapter One: Introduction (Summary of Project)
- Chapter Two: Organization, Staffing and Controls (Task Area One)
- Chapter Three: Fuel Contracting (Task Area Two, Three and Five)
- Chapter Four: Fuel Management (Task Area Two, and Five)
- Chapter Five: Power Transactions (Task Area Six)
- Chapter Six: Power Plant Performance (Task Area Four)
- Chapter Seven: Line Losses (Task Area Seven)
- Chapter Eight: Cost Allocation of FPPCAC (Task Area Eight)
- Chapter Nine: Fuel Clause Computation (Task area Nine)
- Chapter Ten: Evaluation of Fuel Clause Process & Regulations (Task Area Ten)
- Chapter Eleven: Renewable Energy Certificate (REC) Tracker (Task Area Eleven).

## **D. Summary of Findings and Recommendations**

Liberty used a complementary set of work steps and methods to complete this project. Liberty interviewed personnel in a number of departments within SPS, and reviewed data and documents. In addition, our team conducted site inspections of the SPS Chem Lab in Amarillo and the Tolk Generating Station. At the completion of its data gathering and analysis, Liberty prepared observations and findings about performance in each of the areas of management and performance under review. Liberty then drew conclusions and formed recommendations for each conclusion that identified an open need.

Overall, Liberty found the SPS fuel and power procurement and management operations to be effective; we discovered no instances of imprudence during the audit period. Highlights of Liberty's findings are as follows:

- Coal prices were competitive
- SPS displayed good management of coal and gas supply operations and contracts
- SPS conducted a sound overall power procurement and management process
- The fuel and power operations were governed by a good risk management program
- SPS established and operated under appropriate maintenance and outage schedules for its power plants
- Unit availabilities and heat rates of power plants were within normal ranges
- SPS processes for charging and allocating FPPCAC costs met the intent of New Mexico rules and regulations, and were reasonable and consistent
- Examination of the Audit Period's FPPCAC disclosed no significant exceptions or concerns
- The regulations and orders currently governing the New Mexico FAC are clear, concise, and understood by the Company, and within the range of adjustment-clause processing and reporting requirements imposed by other state public utility commissions

- Examination of the Audit Period's REC Tracker disclosed no exceptions or concerns.

The following list of recommendations is categorized by each of the principal areas of investigation for this project. This list of recommendations provides an overall perspective on areas of operation of SPS's fuel and power procurement and management operations meriting some improvement:

#### **Chapter Two – Organization, Staffing and Controls**

1. Develop detailed procedures for the procurement of power generation fuels within the next three months.
2. Supplement the Code of Conduct Procedures within the next month by requiring that all employees sign an annual affidavit confirming their compliance with such procedures.

#### **Chapter Three – Fuel Procurement and Contracts**

1. Perform a careful study to identify alternatives for all of the plants currently being served by Oneok WestTex.

#### **Chapter Four – Fuel Supply Management**

No recommendations in this area.

#### **Chapter Five – Power Purchases, Sales, and Trading Operations**

1. Complete and approve official operating procedures and guidelines for its real-time operations desk.
2. SPS should analyze whether it would be beneficial to not renew the expiring Golden Spread wholesale contract in 2012.

#### **Chapter Six – Power Plant Performance**

1. Standardize the reporting and analysis procedure related to use of Root Cause Outage Analysis Reports, and confirm that appropriate levels of management have reviewed and approved of the Reports for two long outages at Harrington Unit #2 in 2010.

#### **Chapter Seven – Line Losses**

1. Perform line loss calculations on a periodic basis, rather than only in anticipation of regulatory filings.
2. Develop methods to better qualify and quantify those system losses labeled as "undeterminable."

#### **Chapter Eight – FPPCAC Cost Allocations**

No recommendations in this area.

#### **Chapter Nine – Fuel Clause Computation**

1. Adequately document and explain all adjustments to the standard monthly FPPCAF calculation template.

### **Chapter Ten – Evaluation of Fuel Clause Process and Regulations**

1. The New Mexico PRC and the Company should consider adjustments to the current FAC to separate refunds from the current fuel and purchased power costs.

### **Chapter Eleven – Renewable Energy Certificate (REC) Tracker**

No recommendations in this area.

### **III. Fuel Procurement and Contracts**

#### **A. Background**

This chapter addresses the following areas related to coal procurement, coal pricing and contracts:

- Coal Fuel Burned
- Coal Sources
- Coal Prices
- Contract Purchases and Summaries
- Contract Actions

In addition, this chapter addresses the natural gas fuel contract status as follows:

- Capacity Contracting
- Commodity Contracting
- Fuel Oils

#### **B. Coal Findings**

##### **1. Coal Consumption**

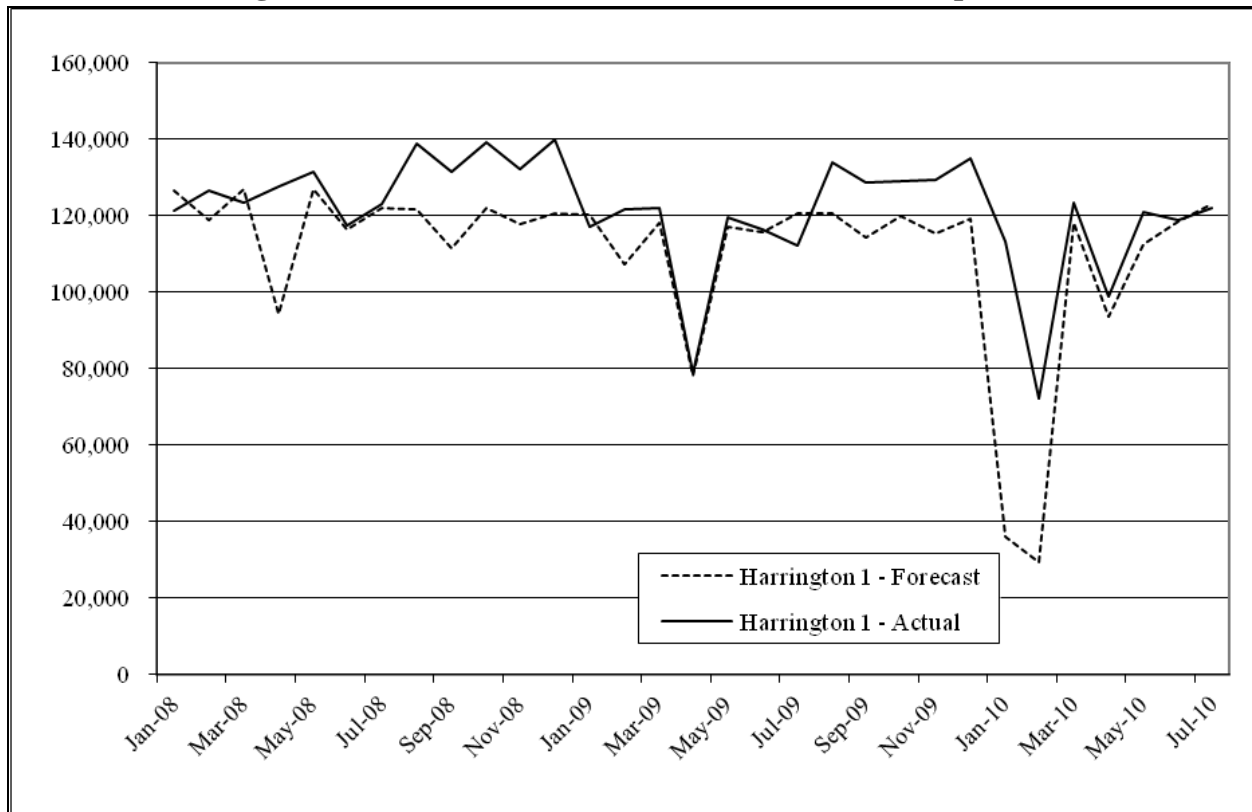
Rail transportation provides the transport method for coal consumed by SPS to generate electricity at its Harrington and Tolk Generating Stations. The Harrington Station is located near Amarillo, Texas, and the Tolk Station is located near Muleshoe, Texas. SPS receives coal under an unusual arrangement with TUCO, an outside company that manages the fulfillment of the SPS coal fuel requirements. The arrangement is unusual because the vast majority of electric utility coal supply agreements are made directly between the utility and the coal company, without having a third party in the middle of such arrangements. TUCO buys the coal from coal suppliers under its own separate agreements directly between it and the coal companies. In turn, TUCO then has its own separate agreement with SPS for delivery of coal to the Company. TUCO owns the coal up until the time the coal is burned at the generating stations, including the inventory of coal, and negotiates the supply and transportation contracts. SPS pays for the fuel at the bunker, defined as the boiler burner nozzle tip. Two long-term supply arrangements that have been in place for both the Harrington and Tolk Stations since the mid-1970s. The characteristics of these two stations are as follows:

**Table III.1 – Station Characteristics**

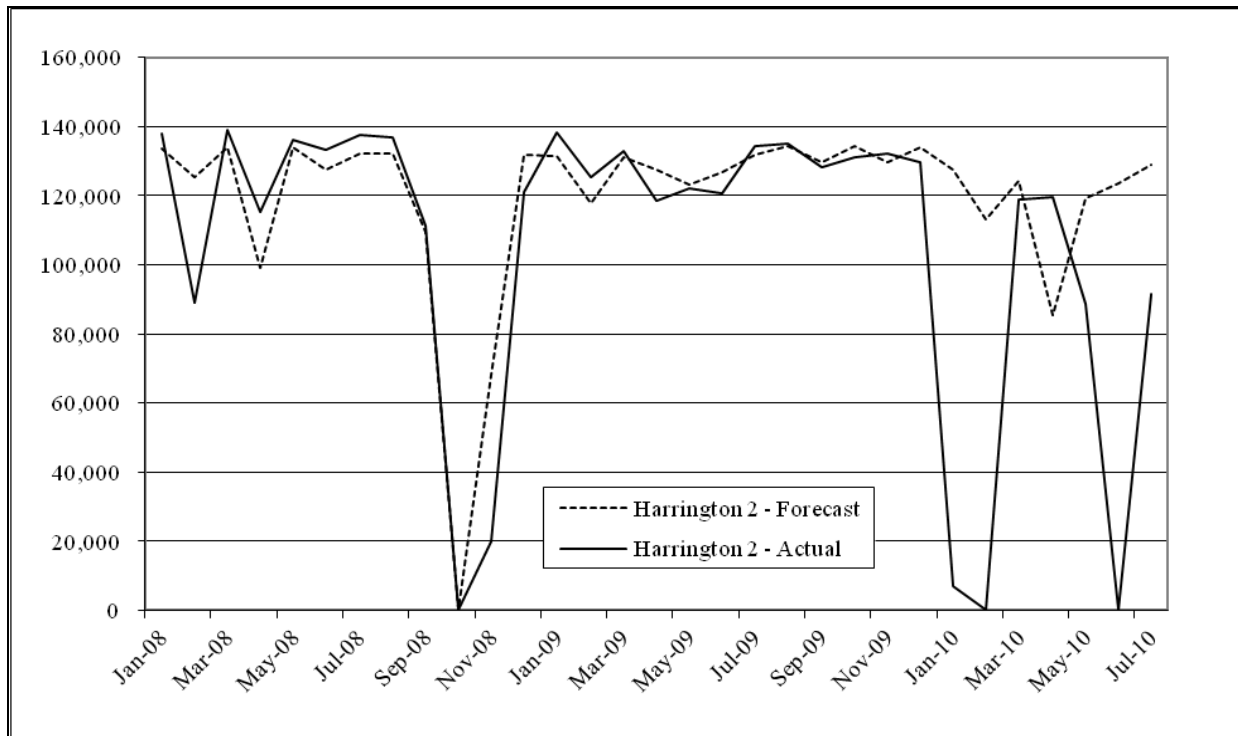
Unit	Normal Fuel	Rating, MW Net Summer	Tons Consumed Annually
Harrington 1	Coal	334.5	
Harrington 2	Coal	338	
Harrington 3	Coal	340	
Harrington Total			4,300,000
Tolk 1	Coal	521.6	
Tolk 2	Coal	526.3	
Tolk Total			4,500,000
Total			8,800,000

SPS burns low sulfur western coal from the Powder River Basin (PRB) in Wyoming. This coal has a BTU content that ranges from 8,300 Btu/lb to 8,800 Btu/lb, with a sulfur content that averages 0.34 percent. The next series of graphs show total coal consumption in tons, by month from January 2008 through July 31, 2010, for each of the Harrington and Tolk units. The graphs compare this actual burn information with SPS's forecasts of burns for each month.

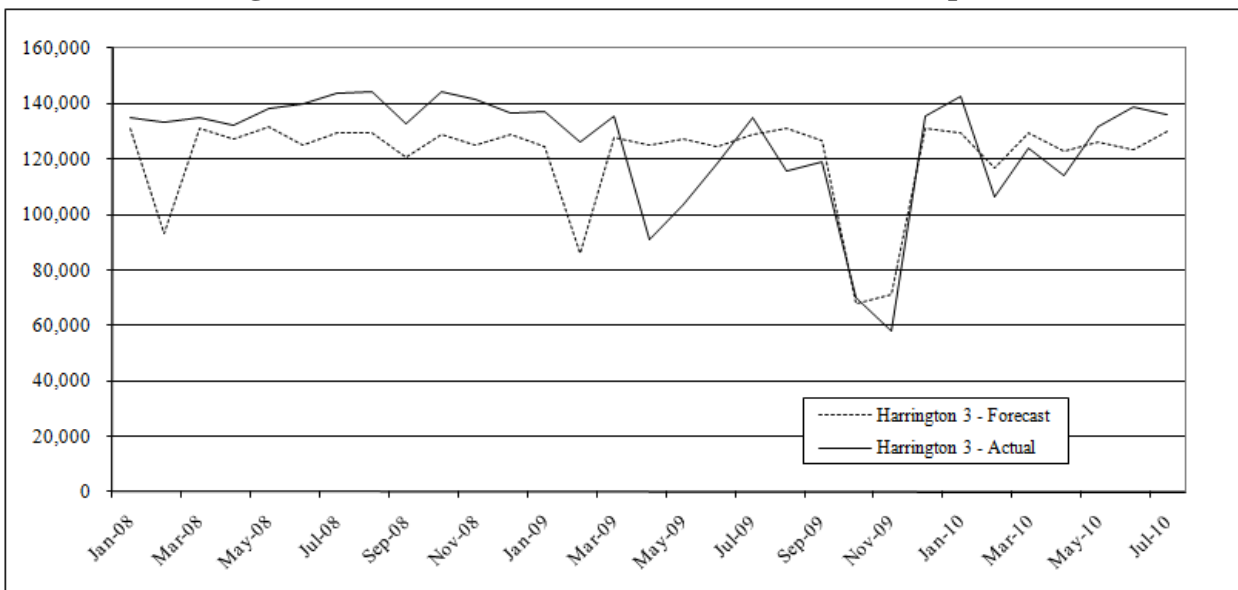
**Figure III.1  
Harrington Unit #1: Actual Versus Forecast Coal Consumption-Tons**



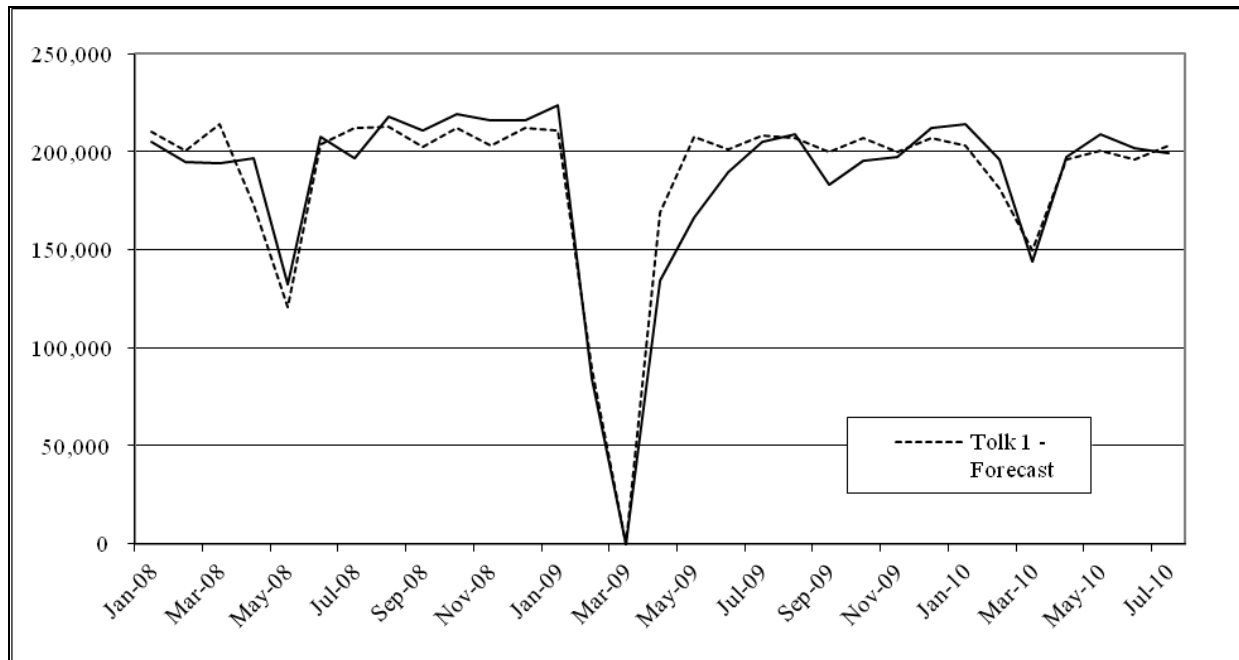
**Figure III.2**  
**Harrington Unit #2: Actual Versus Forecast Coal Consumption-Tons**



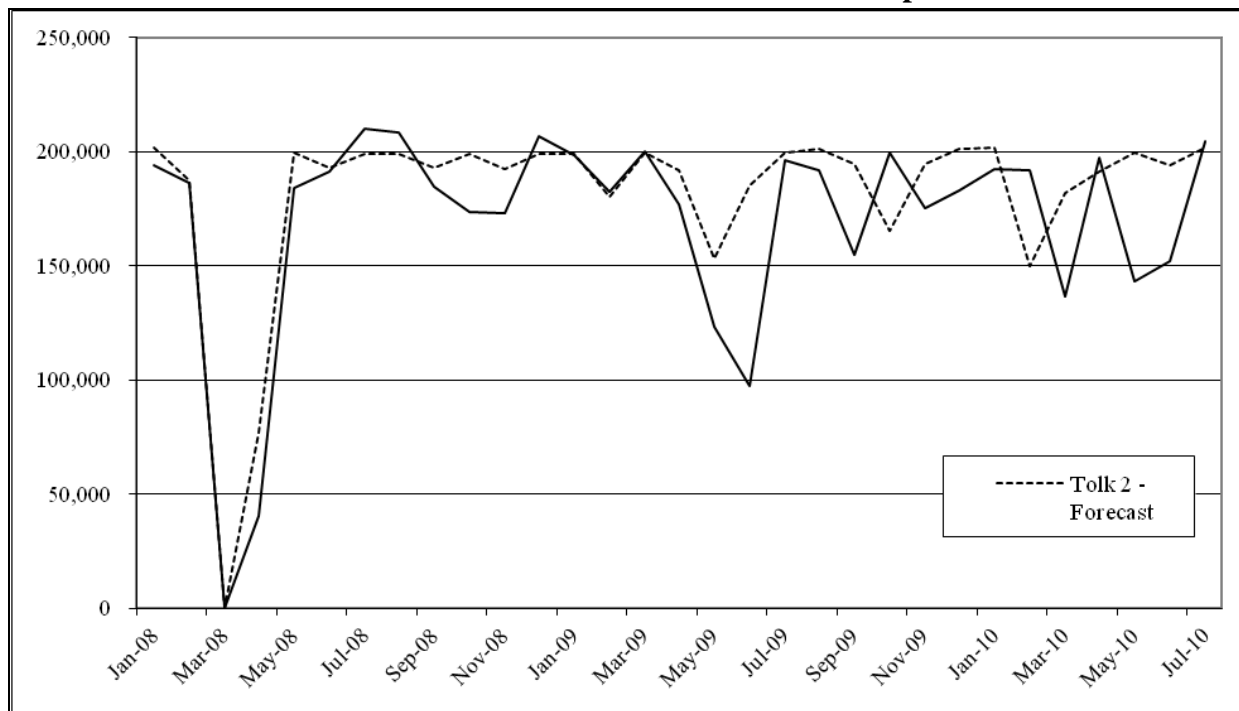
**Figure III.3**  
**Harrington Unit #3: Actual Versus Forecast Coal Consumption-Tons**



**Figure III.4**  
**Tolk Unit #1: Actual Versus Forecast Coal Consumption-Tons**



**Figure III.5**  
**Tolk Unit #2: Actual Versus Forecast Coal Consumption-Tons**



The following tables summarize the annual comparisons between coal burn forecasts and actual coal burned for the Harrington and Tolk Units. The Company has experienced a fairly normal variance between forecasts and burns. Harrington Unit #1 generally indicates actual coal burns that are greater than forecast. For Harrington Units #2 and #3, there are no particular trends notable, with the exception of the obvious unplanned outages on Unit #2 in the February and June 2010 time periods. Tolk Unit #1 generally indicates no particular trend, but Tolk Unit #2 has always shown forecasts that were greater than actual coal burns. The differences, however, are not significant.

**Table III.2**  
**Actual Versus Forecasted Coal Consumption: Harrington Station**

<b>Month</b>	<b>2008</b>	<b>2009</b>	<b>2010*</b>
Harrington 1 – Forecast Tons	1,425,301	1,366,382	631,124
Harrington 1 - Actual Tons	1,552,768	1,443,398	769,283
Harrington 1 - Difference – Tons	(127,467)	(77,017)	(138,159)
Harrington 1 - Difference – Percent	(8.9)	(5.6)	(21.9)
Harrington 2 – Forecast Tons	1,326,918	1,551,255	821,916
Harrington 2 - Actual Tons	1,227,224	1,548,306	425,289
Harrington 2 - Difference – Tons	99,694	2,949	396,627
Harrington 2 - Difference – Percent	7.5	0.2	48.3
Harrington 3 – Forecast Tons	1,502,863	1,373,741	878,675
Harrington 3 - Actual Tons	1,657,570	1,345,018	893,967
Harrington 3 - Difference – Tons	(154,708)	28,723	(15,292)
Harrington 3 – Difference – Percent	(10.3)	2.1	(1.7)
Harrington Total – Forecast Tons	4,255,082	4,291,378	2,331,715
Harrington Total – Actual Tons	4,437,562	4,336,722	2,088,539
Harrington Total – Difference – Tons	(182,481)	(45,344)	243,176
Harrington Total – Difference – Percent	(4.3)	(1.1)	10.4

\*2010 data is through July 31, 2010

**Table III.3**  
**Actual Versus Forecasted Coal Consumption: Tolk Station**

<b>Month</b>	<b>2008</b>	<b>2009</b>	<b>2010*</b>
Tolk 1 - Forecast Tons	2,377,025	2,107,679	1,330,945
Tolk 1 - Actual Tons	2,407,471	2,000,530	1,363,702
Tolk 1 - Difference – Tons	(30,446)	107,149	(32,758)
Tolk 1 - Difference – Percent	(1.3)	5.1	(2.5)
Tolk 2 - Forecast Tons	2,040,607	2,264,314	1,319,469
Tolk 2 - Actual Tons	1,952,506	2,079,976	1,217,818
Tolk 2 - Difference – Tons	88,101	184,339	101,651
Tolk 2 - Difference – Percent	4.3	8.1	7.7
Tolk Total – Forecast Tons	4,417,632	4,371,993	2,650,414
Tolk Total – Actual Tons	4,359,977	4,080,506	2,581,520
Tolk Total – Difference – Tons	57,655	291,487	68,894
Tolk Total – Difference – Percent	1.3	6.7	2.6

\*2010 data is through July 31, 2010



## 2. Coal Sources

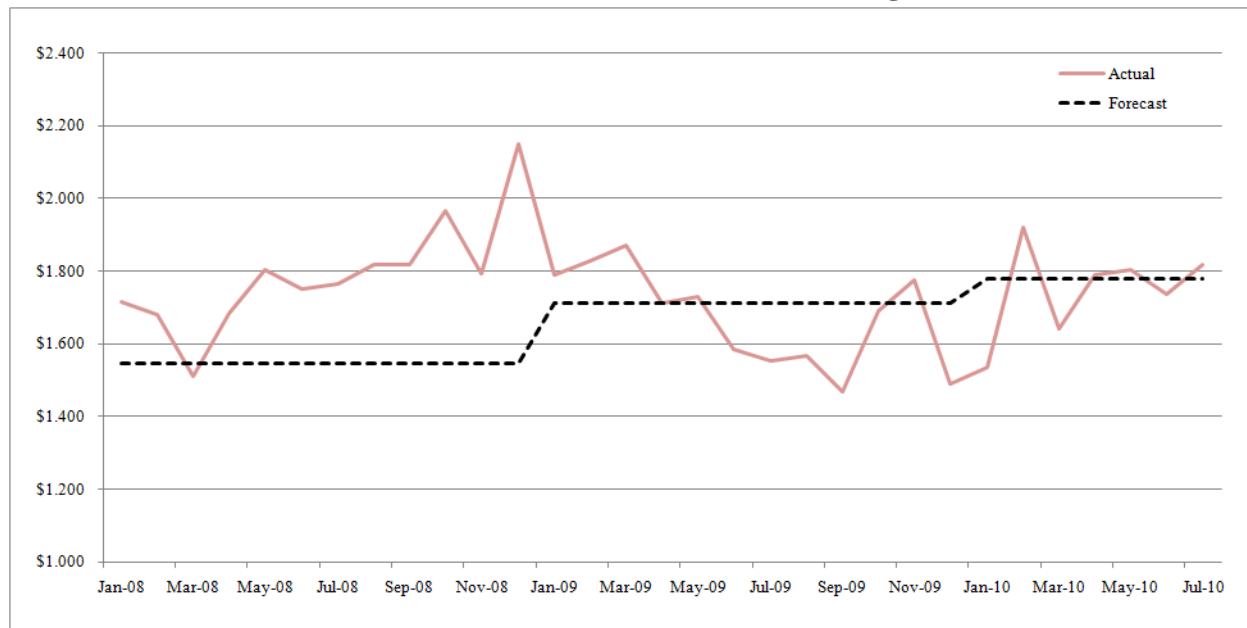
TUCO obtains coal for the SPS Harrington and Tolk units from the Wyoming coal mines of Arch Coal, Inc. (Arch). Arch ships most of the coal from its Black Thunder Mine (Black Thunder), but has the option to ship up to 500,000 tons of coal per quarter from its Coal Creek Mine (Coal Creek). The latter source is generally lower in coal quality than product from Black Thunder. Because Tolk is better able to utilize this lower quality Coal Creek coal, SPS designates Tolk as the recipient for all Coal Creek shipments. SPS appropriately pays less for coal from Coal Creek than it does for coal from Black Thunder on mine cost basis.

## 3. Coal Prices

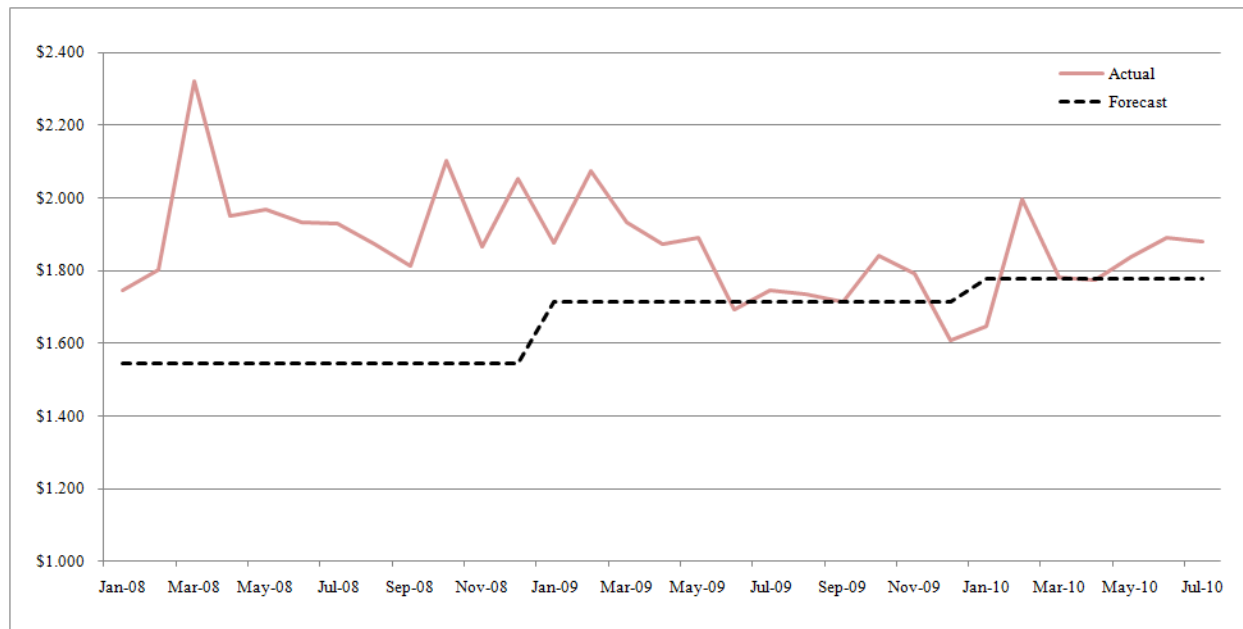
### *a. Actual Versus Forecast Coal Prices*

The next graphs show a comparison of actual versus forecast delivered coal prices for coal consumed at the Harrington and Tolk generation stations. The actual prices shown are burner tip coal prices, and when SPS refers to delivered coal prices, it means “delivered to the burner tip.”

**Figure III.6**  
**Actual Versus Forecast Delivered Coal Prices: Harrington 2008 - 2010**



**Figure III.7**  
**Actual Versus Forecast Delivered Coal Prices: Tolk 2008 - 2010**

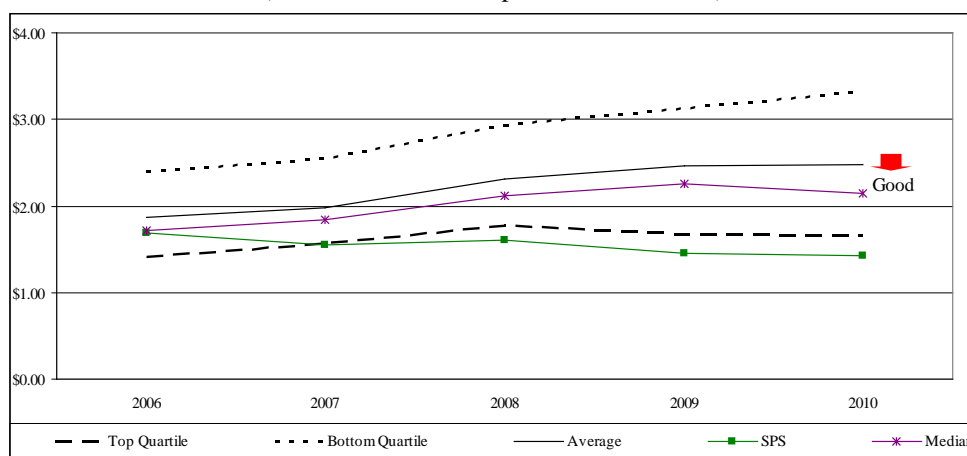


For both stations, the agreement between forecast and actual prices is reasonable beginning in 2009. Before this point in time, actual prices tend to be significantly greater than forecast prices. SPS explains this by noting that effective September 14, 2008, the Company began reporting coal prices differently. Before September 14, 2008, coal prices included more components, such as handling costs. After that date, coal prices included only mine costs and coal freight. SPS has indicated that before September 14, 2008, coal handling costs were difficult to predict.

*b. Coal Price Benchmarking*

SPS and its parent company Xcel Energy conduct their own coal price benchmarking program on a regular basis. Xcel compares itself to other holding companies, and SPS compares itself to other operating companies. In the graph below, as provided by SPS, the Company compares itself to other operating companies. The graph shows the favorable coal pricing maintained by SPS. Liberty confirmed the validity of this coal price data through cross checks with our own coal price information. Liberty also confirmed that the individual components of the coal price, as listed under Pricing Mechanism in Section 4 below were reasonable.

**Figure III.8**  
**Comparison to Peer Operating Companies**  
(Coal Delivered Price per MMBtu Actuals)



\*2010 Prices through February

Liberty has examined the list of operating companies included in the graph. The companies included and the comparisons are reasonable. In fact, there are some distinguishing features of the SPS position. For the early part of 2009, SPS was the sixth lowest price company of 35 companies included in the mix. For the latter part of 2009, SPS was either the 3<sup>rd</sup> or 4<sup>th</sup> lowest priced utility. For all of 2010, SPS ranks second lowest in price, behind only Public Service Company of Oklahoma. Also, SPS consistently ranks lower in price than Arizona Public Service Company, who obtains coal supply from its own mine-mouth coal mine. Also, it would be expected that SPS would have slightly lower prices than Public Service Company of Colorado. Both utilities obtain coal supply from the same region of the country, but SPS has the benefit of obtaining all of its coal supply from the Powder River Basin of Wyoming, while Public Service Company of Colorado obtains a relatively large portion of its coal from the considerably more expensive region of Colorado. The SPS relative position for June 2009 was as shown in the following table:

**Table III.4 – Coal Price Rankings**

Operating Company	Coal Price \$/MMBtu	Position Ranking
Public Service Co. of Oklahoma	\$1.30	Lowest
SPS	\$1.53	4 <sup>th</sup> Lowest
Public Service Co. of Colorado	\$1.57	5 <sup>th</sup> Lowest
Arizona Public Service Co.	\$1.75	9 <sup>th</sup> Lowest
South Carolina Electric & Gas	\$4.33	35 <sup>th</sup> Lowest

#### 4. Contract Purchases and Summaries

As indicated in Section B.1 above, coal for the Harrington and Tolk generating stations is received under contract with TUCO, an outside company that manages the fulfillment of the SPS coal fuel requirements. Two long-term contracts between SPS and TUCO provide for this coal

supply: one for the Harrington Station, and one for the Tolk Station. A summary of each of these contracts follows.

*a. Harrington Contract Summary*

Negotiation Date: April 1979 (restated to incorporate all amendments through 12/31/94, margin amended September 18, 2001).

Original Date of Supply: April 30, 1979 (Fuel supply originally delivered under prior Agreement dated September 1, 1975).

Term: April 30, 1979 through December 31, 2016.

Pricing Mechanism: TUCO's actual cost incurred for (a) FOB mine cost of coal; (b) cost of transportation from the mine to the unloading facilities; (c) costs incurred for furnishing railcars and for handling, storing, crushing, processing, weighing, and delivering coal; (d) assessments and taxes (except federal and state income taxes); (e) cost of financing coal inventories; and (f) cost of coal losses; plus a margin.

Purchase Obligation: Requirements of Harrington Station with a Base Quantity of 3 million tons per year at 8,700 Btu/lb. Quantities measured in terms of trillion BTUs delivered. TUCO enters into contracts with various coal suppliers to procure coal supplies for delivery under this Agreement.

Maximum Quantities Available: 15 percent in excess of Base Quantity. Additional coal in excess of Base Quantity may be supplied by Seller using its best efforts and, if contracts for additional coal are approved by Buyer, those quantities will be included in coal supplied under this Agreement. SPS may increase coal purchases up to 15 percent or decrease coal purchase by 15 percent once a year. Any such increases or decreases are to be incorporated into future delivery schedules.

Economic Out Provision: None (Such a provision would give either party the option to terminate the agreement if certain economic conditions occurred).

Delivery Point: Coalbunkers at Harrington Station.

Transportation Provision: Fuel is purchased FOB at the point(s) of Delivery (Harrington bunkers) at prices expressed in dollars per MMBtu, and includes all transportation fees to the Point(s) of Delivery. TUCO has entered into a transportation Agreement with the Burlington Northern Santa Fe Railroad for transportation of coal supplies delivered under this Agreement. In addition, TUCO has entered into a contract with a third party to provide coal-handling services (Savage).

Quality and Measurement

- Coal quality is to be within specified ranges for typical coal set forth in Exhibit B to the contract, including ranges for Btu/lb, Moisture, Ash, Sulfur, and LBS of SO<sub>2</sub>.

- Heating Value Range must be within 7,900 – 9,000 Btu/lb.
- Samples taken by TUCO per ASTM standards; results reported in a monthly analysis prepared by SPS.
- Either party may question correctness of original analysis; commercial testing laboratory then used to do an independent analysis.
- SPS has right to have representative present to observe sampling.

Billing

- Seller is to invoice on or before 8<sup>th</sup> day of each month.
- Invoices are due and payable on or before 1<sup>st</sup> working day after 15<sup>th</sup> day of month.
- Past due interest charges are assessed at 1% over prime.

Force Majeure: Force Majeure is plant specific. May claim partial force majeure. Complete shutdown is not required.

*b. Tolk Contract Summary*

Negotiation Date: April 1979 (restated to incorporate all amendments through 12/31/94, margin amended September 18, 2001).

Original Date of Supply: April 30, 1979 (Fuel supply originally delivered under prior Agreement dated September 1, 1975).

Term: April 30, 1979 through December 31, 2017.

Pricing Mechanism: TUCO's actual cost incurred for (a) FOB mine cost of coal; (b) cost of transportation from the mine to the unloading facilities; (c) costs incurred for furnishing railcars and for handling, storing, crushing, processing, weighing, and delivering coal; (d) assessments and taxes (except federal and state income taxes); (e) cost of financing coal inventories; and (f) cost of coal losses; plus a margin.

Purchase Obligation

- Quantities measured in terms of trillion Btus delivered.
- Annual quantity for 2000: 46.59 trillion Btus. Requirements of Tolk Station with Minimum Annual Quantity for each of years 2001-2017: 46.59 trillion Btus.
- TUCO enters into contracts with various coal suppliers to procure coal supplies for delivery under this Agreement.

Maximum Quantities Available: Maximum Annual Quantity for 2000: 66.99 trillion Btus; and each of years 2001-2017; 56.95 trillion Btus with Seller's good faith effort to obtain additional coal if needed.

Economic Out Provision: None.

Delivery Point: Coalbunkers at Tolk Station.

Transportation Provision: Fuel is purchased FOB the point(s) of Delivery (Tolk bunkers) at price expressed in dollars per MMBtu, and includes all transportation fees to the Point(s) of Delivery. TUCO has entered into a transportation Agreement with the Burlington Northern Santa Fe Railroad for transportation of coal supplies delivered under this Agreement. In addition, TUCO has entered into a contract with a third party to provide coal-handling services (Savage).

#### Quality and Measurement

- Coal to be within specified ranges for typical coal set forth in Exhibit B to the contract, including ranges for Btu/lb, Moisture, Ash, Sulfur, and LBS of SO<sub>2</sub>.
- Heating Value Range must be 7,900 – 9,000 Btu/lb.
- Samples taken by TUCO per ASTM standards; results reported in a monthly analysis prepared by SPS.
- Either party may question correctness of original analysis; commercial testing laboratory then used to do an independent analysis.
- SPS has right to have representative present to observe sampling.

#### Billing

- Seller is to invoice on or before 8<sup>th</sup> day of each month.
- Invoices are due and payable on or before 1<sup>st</sup> working day after 15<sup>th</sup> day of month.
- Past due interest charges are assessed at 1 percent over prime.

Force Majeure: Force Majeure is plant specific. May claim partial force majeure. Complete shutdown is not required.

#### *c. Contract Exhibit B Coal Specifications-Both Contracts*

	<u>Typical</u>	<u>Range</u>
% Moisture	28.0	24.0 – 33.0
% Ash	4.9	3.2 – 5.6
% Volatile	32.2	29.0 – 35.0
% Fixed Carbon	34.9	31.5 – 37.5
BTU/Pound	8,500	7,900 – 9,000
% Sulfur	0.34	0.21 – 0.47
LB SO <sub>2</sub> /MMBtu	0.80	0.52 – 1.09

### **5. Contract Actions**

Given the long-term nature of the two coal supply contracts between SPS and TUCO, Liberty sought to determine whether SPS had made sufficient efforts related to these contracts to either purchase these contracts, or otherwise adjust them in order to reduce customer fuel supply costs.

In 2007, in an effort to reduce the cost of coal delivered to the Harrington and Tolk Stations under the TUCO agreements, and to reduce customer costs, SPS conducted a thorough review of these two agreements. As a result of this review, SPS and TUCO entered into discussions for the acquisition of certain TUCO assets and a “buyout” of the coal supply agreements. SPS was not able to reach agreement on a transaction structure and a purchase price with TUCO. The value of

the assets and the coal supply agreements, as determined by TUCO, was significantly (in millions of dollars) higher than that determined reasonable by SPS.

SPS had identified a number of issues related to this high price that made such a “buyout” questionable. Included was the fact that the likely acquisition price exceeded the book value of tangible assets as well as what was likely required to satisfy seller’s overleveraged funding requirements. In addition to concern with the basic high price required, SPS believed that there were sufficient intangibles associated with such a purchase that there was real concern for the recoverability of the full acquisition price.

These actions by SPS in 2007 and 2008 considering a “buyout” of TUCO were not the first time such strategies for fuel cost minimization had been considered. On August 14, 1995 SPS filed an application with the New Mexico Public Utilities Commission related to the proposed acquisition and merger into SPS of TUCO, Inc. Subsequently, on October 16, 1996, in Case No. 2658, SPS withdrew the referenced application. The reasons for such withdrawal were extensive. As part of the proposed acquisition of TUCO, SPS had filed in Texas to obtain interim recovery of coal handling costs through the fuel factors until the earlier of SPS’s next base rate case, or three years. The parties in the case entered into a unanimous stipulation allowing such recovery. However, the Public Utility Commission of Texas rejected the stipulation, at the time, based on the thought that SPS would be deregulated and unbundling its services in the near future. Without interim recovery of the coal handling costs, SPS could not afford to go forward with the proposed acquisition and not recover these coal handling costs until the costs could be reflected in base rates. In addition, with the pending deregulation, it was uncertain as to whether or not any increase in base rates would even be considered by the Texas Commission. Given these adverse conditions in Texas, SPS made the decision to withdraw its application in New Mexico related to the proposed acquisition of TUCO.

There have been no renegotiations, amendments, or extensions to the TUCO coal supply agreements in the period January 1, 2008 through July 31, 2010.

## **6. Natural Gas Findings**

In this section we consider the following questions:

- How does SPS decide how much gas to buy? Commodity? Capacity?
- From whom does SPS buy commodity? Capacity?
- What types of supply does SPS buy? Term supplies? Spot-market supplies?
- What processes does SPS use to buy gas? Requests for proposals? Informal solicitations? Electronic trading platforms?
- What efforts has the Company made to expand its access to alternative sources of gas supplies?
- Are these reasonable best practices for these processes?

## **7. Capacity Contracting – Natural Gas**

Capacity contracting for the Xcel Companies’ natural-gas needs is driven by the nature of the requirement being addressed. For SPS, the requirements are all electricity generation (no retail

XES reports that the identity of the active suppliers is pretty steady. With some effort, XES locates two to four additional suppliers each year. XES reports that it follows standard approaches to qualifying gas-supply vendors:

- Producers selling their own supply at a published market price are considered low risk; thus, a formal credit analysis is not generally required. Producers selling their own supply own such supply, and thus low risk, whereas marketing companies' assets are typically receivables, and thus higher risk.
- Marketing companies are subjected to a credit analysis: multiple years of financial statements, ratings from rating agencies, compare company size to the notional value of the transaction.

## **9. Fuel Oils**

The two generating units at the Jones plant, and two of the four units at Plant X, can burn No. 2 fuel oil, rather than natural gas. Gas is currently less expensive, however, so gas is the primary generating fuel at these plants. Power-pool policies require "sufficient quantities of standby fuel" when contractual or physical fuel-supply arrangements permit curtailment or interruption of normal fuel supplies. Thus, SPS maintains inventories of fuel oil at both plants.

Storage capability at the Jones plant is 3,600,000 gallons; at Plant X, 1,600,000 gallons. There are two storage tanks at each plant. SPS's practice is to maintain sufficient inventory to fill one of the tanks at each location. Oil is transferred between the tanks as necessary for maintenance of the tanks.

The Company maintains two small diesel-powered generating units at Tucumcari, NM. They would only be used if there was a long-term outage of the transmission line that services Tucumcari. There are two fuel storage tanks at the site, each with a capacity of 15,000 gallons. The Company reports that inventory there is about 22,000 gallons.

No. 2 fuel oil is very nearly the same as diesel fuel. Thus, it is widely available in the quantities that SPS would require, from multiple vendors in each area where SPS would use it. The Company maintains on its intranet lists of qualified suppliers for each generating plant. When additional supplies are needed, Gas Supply personnel contact qualified suppliers for product availability and a price quote. They then accept the offer that best combines price and delivery schedule, execute a contract and schedule the delivery.

## **C. Conclusions**

### **1. SPS's forecasts for coal consumption have remained relatively stable compared to actual consumption, with two major exceptions.**

SPS has done a reasonable job of forecasting coal consumption. The two cases of significant variance were for early 2010 when the Harrington Unit #2 went down for unplanned outages in both January and May 2010. Such occurrences are difficult to predict during the forecasting process.



**2. SPS's forecasts for delivered coal prices have shown reasonable correlation with actual prices since changing the basis of coal prices on September 14, 2008.**

On September 14, 2008, SPS changed the basis upon which it reports coal prices from an earlier system that included a number of components of the coal price, including coal handling costs, to the current system that only includes mine coal costs and coal freight. Since the time of this change in price basis, there has been a reasonable correlation between actual and forecast coal prices.

**3. Benchmarking data shows that SPS delivered coal prices are competitive when compared to other similar utilities.**

For the early part of 2009, in terms of delivered coal prices, SPS was the sixth lowest price company of 35 companies included in the benchmarking study. For the latter part of 2009, SPS was either the 3<sup>rd</sup> or 4<sup>th</sup> lowest priced utility. For all of 2010, SPS ranks second lowest in price, behind only Public Service Co. of Oklahoma. Also, SPS consistently ranks lower in price than Arizona Public Service Company, who obtains coal supply from its own mine-mouth coal mine. Liberty confirmed the validity of this coal price data through cross-checks with our own coal price information.

Overall, SPS is in a very favorable coal price situation, and those utilities that do have less expensive delivered coal prices could not be considered comparable utilities from the perspective of delivered coal prices.

**4. SPS has acted appropriately with respect to the TUCO coal supply arrangement in its efforts to modify the agreement, as well as in its efforts to extract itself from this agreement.**

In 1995 SPS made attempts to structure an acquisition and merger into SPS of TUCO, Inc., and filed documentation with the New Mexico Public Utilities Commission to this effect. This effort was not effective, and subsequently in 1996 this effort was closed.

In 2007, in another effort to reduce the cost of coal delivered to the Harrington and Tolk Stations under the TUCO agreements, SPS and TUCO entered into discussions for the acquisition of certain TUCO assets and a "buyout" of the coal supply agreements. SPS was not able to reach agreement on a transaction structure and a purchase price with TUCO. The value of the assets and the coal supply agreements, as determined by TUCO, was significantly (in millions of dollars) higher than that determined reasonable by SPS.

**5. Gas-supply capacity contracting is driven by the characteristics of the generating units that it will serve.**

For new generation, Gas Resource Planning starts from a description of the operating characteristics of the generating units that it is intending to serve, and develops supply-capacity alternatives that provide those capabilities. For existing plants, it derives performance criteria from the needs of the generating plants that the capacity will serve. Competitions are conducted for delivery systems that can meet those performance criteria.

**6. In SPS's case, supply flexibility has figured prominently in the design of the capacity portfolio.**

SPS is fortunate to be serving an area that is rich with gas pipeline and storage facilities. XES's Gas Resource Planning has done a nice job of using the same pipelines to serve many of SPS's generating facilities. This commonality allows considerable ability to move gas among generating plants, and considerable ability to share among them the more-costly components of the capacity portfolio, such as balancing services, and services that allow hourly flow to vary.

**7. SPS's arrangements on the Oneok WesTex may be subject to cost improvement.**  
*(Recommendation #1)*

In general, SPS's approach to gas-supply capacity contracting is, in our view, consistent with industry best practices. While Liberty would not recommend any changes to that approach, SPS's arrangements on Oneok WesTex need some concentrated attention.

Oneok WesTex Transmission serves a number of SPS's generating plants. Obtaining the operational capabilities necessary to serve those plants requires additional services that are currently provided by two other Oneok subsidiaries, Oneok Texas Gas Storage and Oneok Energy Services. SPS could reduce the cost of the services that it requires if it could get more storage (capacity and deliverability) from Texas Gas Storage, but that facility is fully subscribed at this time. Among the subscribers to that facility is Oneok Energy Services, the affiliate that provides the load-following service.

These arrangements are probably more costly than they should be. Because they are being provided by members of the same corporate "family," each of which is likely to be familiar with the others' operating capabilities and cost structures, it seems likely that the services have been configured and priced to extract extra "rent" from customers like SPS. SPS should address this situation.

**8. The Company's approach to commodity contracting is satisfactory.**

Again, the Company's location in the midst of numerous gas-supply possibilities is a considerable advantage for maintaining an open, transparent commodity-purchase program. The fact that the Company continues to add a few suppliers each year is a plus.

**9. The Company's approach to fuel-oil supply is satisfactory.**

Because No. 2 fuel oil and diesel fuel are so readily available, no special provisions are required for their supply. The only questions would be supplier qualifications and price. The Company's Purchasing Department maintains this information on the Company intranet. This approach is typical of utility practice, and acceptable.

**D. Recommendations**

**1. Perform a careful study to identify alternatives for all of the plants currently being served by Oneok WesTex.** *(Conclusion #7)*

The Company is aware that the three services that it buys from Oneok affiliates are more costly than they would be if configured to SPS's requirements. It seems unlikely, however, that Oneok would volunteer to lower SPS's costs by realigning its services to better suit SPS's requirements unless it was forced to do so in order to retain SPS as a customer.

Liberty recommends that SPS perform a careful study to identify alternatives for all of the plants currently being served by Oneok Westex. Construction of additional facilities should be included in the array of possible options.

The current transportation and storage service contracts expire at the end of September 2011, although they continue month-to-month unless terminated by either party. Discussions over terms for continuing the services should start well before the end of the current contracts. We recommend that the options study be completed before April 30, 2011.

## **IV. Fuel Supply Management**

### **A. Background**

This chapter addresses the following areas related to fuel supply management:

- Coal Receipt Information
- Coal Contract Administration
- Coal Inventory Control
- Natural Gas and Fuel Oil Supply Management

### **B. Coal Findings**

#### **1. Coal Receipt Information**

Coal is received at the Harrington and Tolk Stations by unit trains, and unloaded at the station coal unloading facilities. From the unloading facilities, coal is either sent directly to the station for consumption, or directed to coal inventory storage. All of these operations are handled by Savage, which is under contract with TUCO to provide these services.

TUCO owns the coal until it is delivered to SPS at the generating station burner tip. Therefore, SPS does not engage in typical coal receipt monitoring activities. Instead, SPS pays for coal on the basis of deliveries by TUCO at the Harrington and Tolk station burner tip.

Overall contract administration is facilitated by regular communication between SPS, TUCO, Savage, and the coal mine. There is a regularly scheduled monthly telephone call that begins from a preset agenda, and includes SPS station personnel, SPS fuel management personnel, as well as SPS administrative personnel. Also, there are three regular daily emails from the coal mine to SPS personnel at the stations, and in fuel management; also included on the distribution list are personnel from both TUCO and Savage. These regular emails detail rail shipping plans and schedules for coal deliveries to both Harrington and Tolk Stations.

SPS receives information on the quantity and quality of coal delivered to the station burner tips from TUCO delivery manifests. This information is input into the SPS Fuelworx system by the SPS Transportation Portfolio Group. Actual coal consumption is based on data from the belt scales on the coal feeders. This quantity information is transmitted to TUCO and forms the basis of payments to TUCO for coal delivered to the burner tip. Data from these scales is also used in determination of individual generating unit performance characteristics, such as heat rate data. The scales are ASTM certified, are calibrated quarterly, and their accuracy is +/- (0.25%).

Coal qualities are determined on a regular basis by coal samples that are taken at the station by Savage just as the coal is going into the bunkers. The belt sampling system is ASTM certified, and the results of analyses on such samples are used as the basis for coal quality reported by the supplier. In addition, samples are selected on a predetermined frequency by SPS and analyzed at the SPS Lab in Amarillo. Fuel Supply Operations personnel then compare the Energy Supply

Lab analysis to the supplier lab analysis and resolve any variances in accordance with contractual provisions.

Liberty's visit to the Energy Supply Lab found the facilities well equipped and maintained, and staffed with well-qualified and experienced personnel. The head chemist has over 13 years of experience, and the manager has over 19 years of experience, including an advanced degree in chemistry. SPS has also identified a designated "backup" chemist, in the event the head chemist is not able to perform normal laboratory duties. The Lab conducts analyses for fuel samples from all stations in the SPS territory.

Personnel at the Lab are in regular contact with Fuel Supply Operations personnel through daily emails and regularly scheduled weekly phone calls that deal with complete status reports as well as identification of any problems with fuel quality or instrumentation.

Laboratory equipment is calibrated on a regular basis, in accordance with ASTM standards. In addition, the Lab is engaged in a monthly round-robin coal analysis program with the Xcel coal lab in Minneapolis.

## **2. Contract Administration**

Fuel contract administration is the overall responsibility of the Director, Fuel Supply Operations, who reports directly to the Vice President, Fuels. The Director is assisted by the Regional Manager, Fuel Supply Operations, who is primarily responsible for the administration of all fuel supply contracts within his region, which includes SPS.

Fuel Supply Operations personnel are guided in the procurement and management of fuel supplies by the policies and procedures described in Chapter Two, Organization, Staffing and Controls. In addition SPS has stated that its goals and objectives related to fuel procurement and management are as follows:

- Maximize competition among suppliers
- Purchase SPS's fuel and purchased power requirements under a Portfolio Approach
- Maximize fuel supply reliability and flexibility
- Actively promote beneficial changes in the fuel supply and related transportation industries through legislative, judicial, and regulatory avenues
- Have an informed base of knowledge concerning fuel supply, demand, pricing, and other related issues affecting SPS and its customers
- Develop strategies for fuel and purchased power use.

Day to day fuel contract administration activity is handled by the Principal Coal Portfolio Coordinator, who reports directly to the Regional Manager, Fuel Supply Operations. This individual monitors daily fuel contract information related to fuel quantities and qualities delivered, and regularly enters such fuel information into Fuelworx. Part of this activity includes monitoring the monthly penalty and premium data related to fuel quantities and qualities delivered. He also communicates daily with fuel personnel at both the Harrington and Tolk Stations and meets monthly to discuss fuel management issues at the Station.

Coal prices are adjusted in accordance with terms and conditions of the contract between TUCO and SPS. On a quarterly basis, TUCO provides SPS with the calculations and back up information on indices used to adjust prices of coal that are provided to TUCO by the current coal supplier, Arch Coal Company. TUCO does not further adjust the price for coal delivered to SPS.

### 3. Contract Compliance

#### *a. Quantity Administration*

During the period from January 1, 2008 through 2010 to date, SPS did not experience any situations where quantities of contracted coal were not delivered.

#### *b. Quality Administration*

During the period from January 1, 2008 through 2010 to date, SPS did experience some situations where proper coal qualities were not delivered. Out of specification deliveries for both ash and sulfur are determined by contractual specifications, as measured in pounds per million Btu (#/MM). During 2008, there were no trains delivered where coal quality was out-of-specification. In 2009, there was one train delivered to Tolk where Btu, and sulfur (measured as sulfur dioxide) were reported out-of-specification. For Harrington, there were three trains delivered where coal was out-of-specification; two trains had low Btu/pound and high ash, and one train had high ash. Details for 2009 are shown in the following table, with out of specification conditions shown in red:

**Table IV.1**  
**2009 Out-of-Specification Coal Deliveries**

Coal Quality Limits	Btu/#	Ash #/MM	Sulfur Dioxide#/MM
	8,800	7.1	1.0
Tolk 1/25/2009	8,769	6.888	1.1404
Harrington 1/24/2009	8,600	8.895	0.8140
Harrington 2/20/2009	8,827	7.318	0.6118
Harrington 9/19/2009	8,719	7.501	0.8028

During 2010 through July 31<sup>st</sup>, there were no trains for Harrington that contained out of specification coal, and there were eight trains for Tolk that had ash content higher than specification. The details for these trains are as shown in the following table:

**Table IV.2**  
**2010 Out-of Specification Coal Deliveries**

Coal Quality Limits	Ash #/MM
	7.1
Tolk 3/23/2010	7.26
Tolk 4/30/2010	7.20
Tolk 6/21/2010	7.15
Tolk 6/23/2010	7.15

Tolk 6/28/2010	7.40
Tolk 6/30/2010	7.19
Tolk 7/1/2010	7.14
Tolk 7/6/2010	7.14

*c. Force Majeure*

There were seven instances during the period from January 1, 2008 through 2010 to date that involved coal contract related force majeure situations. While each of these situations was related to SPS station downtime reports, or railcar light loadings, none of these claims were against either TUCO or SPS. Each of the below listed force majeure situations was claimed by TUCO against either the BNSF Railroad, or Arch Coal Company, in accordance with TUCO's contracts with each of these entities. These situations were as follows:

**Table IV.3 – Force Majeure Situations**

<b>Date</b>	<b>Station</b>	<b>Tons</b>	<b>Company</b>	<b>Description</b>
Jan. thru July 2009	Harrington	69,021	Arch	Multiple Outages
Jan. thru July 2009	Tolk	169,835	Arch	Multiple Outages
8/20/09-8/26/09	Harrington	19,942	Arch	Unit #3 Tube Leak FM
9/22/09-9/26/09	Harrington	46,148	Arch	Derailment on plant loop
12/2/09-12/6/09	Tolk	25,731	Arch	Downtime, Ash Drag Chain
12/2/09-12/6/09	Tolk	29,501	BNSF	Downtime, Ash Drag Chain
1/1/10-3/31/10	Both	6,979	Arch	Light railcar loadings at multiple mine locations.

There were no situations during the period from January 1, 2008 through 2010 to date when either TUCO or SPS claimed force majeure against the other party.

*d. Open Contractual Issues*

The only open coal related contractual issue is the re-opener price on the Amended and Restated Coal Supply Agreement between TUCO and Arch Coal Company. The contract allows for period price-reopeners every five years, and the current reopener will be for prices beginning January 1, 2011. In order to reopen prices, the current price must be greater than 10 percent out of the market. SPS is following this matter closely, and does not know at the current time whether or not there will actually be a price change.

#### **4. Coal Inventory**

While coal inventory management is the responsibility of TUCO and not SPS, nevertheless, SPS has established coal inventory targets for both the Harrington and Tolk Stations and provided them to TUCO. Because of the nature of the contractual relationships, SPS has not provided any inventory management targets to Savage, but has left this to be dealt with in the contractual relationship between TUCO and Savage. Coal inventories are maintained only on a total station basis, not on a unit basis.

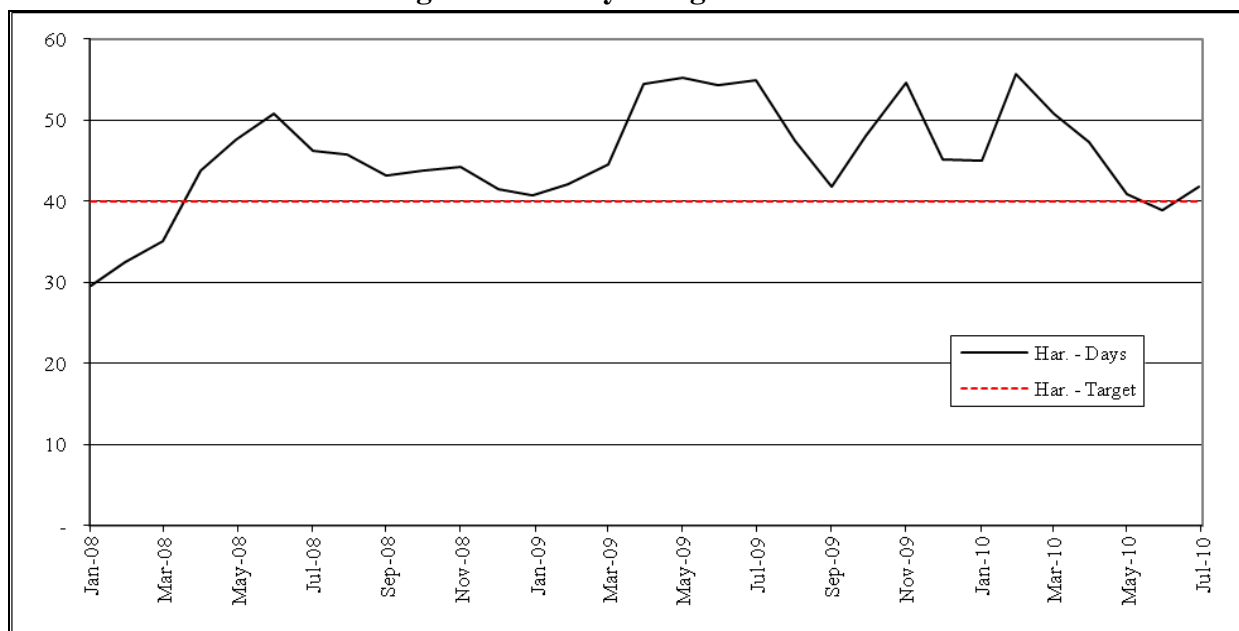
The target for Harrington is 40 days of coal supply, and for Tolk the target is 46 days of coal supply. Because of the nature of the coal contracts that deal with coal quantities on an MMBtu basis, the coal inventory at each station is dealt with on an MMBtu basis, and then converted to tons of coal. The calculation of tons of coal from MMBtu has been based on maximum daily burn of coal.

At both the Harrington and Tolk Stations the individual generating units at each station have essentially the same characteristics, and thus it is not necessary to maintain separate inventory piles for each unit within the station.

During the time period from January 1, 2008 through 2010 to date, coal inventory at the Harrington Station ranged from a low of 30 days of supply in January 2008 to a maximum of 56 days of supply in February 2010. For the Tolk Station, the minimum level of supply was also in January 2008 at 34 days of supply, with the maximum at 72 days of supply in January 2009. The monthly variations in supply are displayed on the graph immediately below.

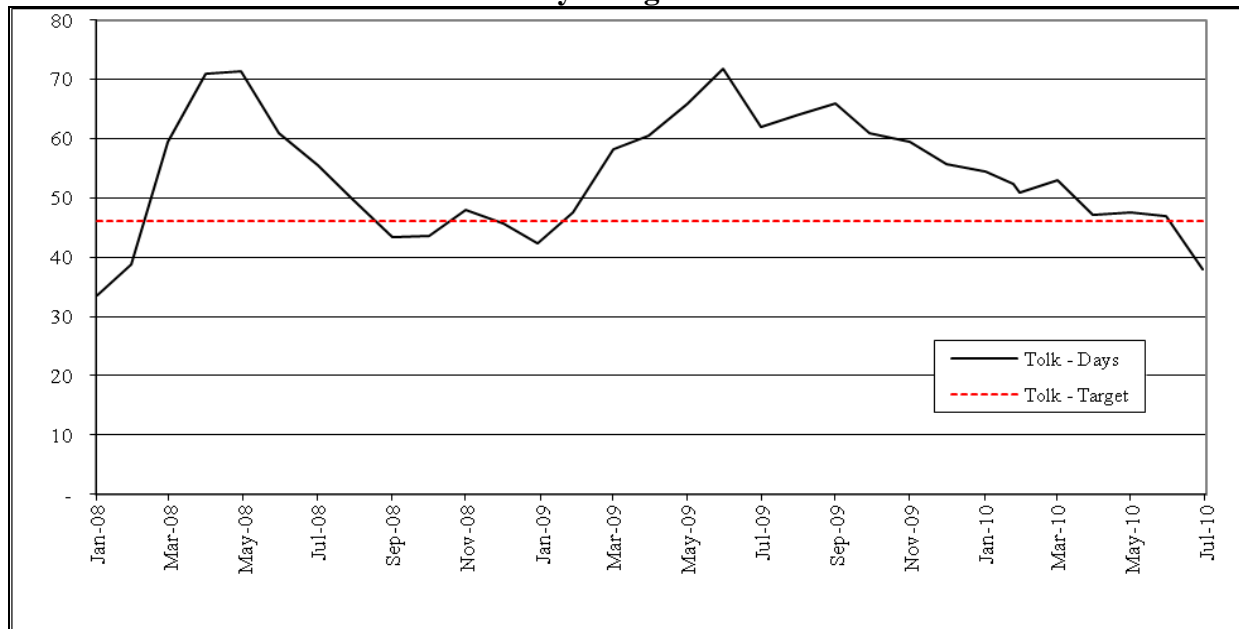
Liberty's discussions with SPS personnel, at both the Tolk Station, as well as within the Fuel Supply Organization, indicated that SPS has been comfortable with the level of coal inventory management at both stations, as directed by TUCO.

**Figure IV.1**  
**Harrington Inventory: Target Versus Actual**





**Figure IV.2**  
**Tolk Inventory: Target Versus Actual**



## C. Natural Gas Findings

In this section we addressed the following questions:

- How does the Company manage the utility's oil- and gas-supply resources? Shared or dedicated personnel?
- What types of secondary-market activities does the utility engage in?
- How do the secondary-market margins from utility trading activities compare with the costs of maintaining the gas-supply resources used in conducting them?

### 1. Gas Capacity Management

SPS's principal gas-supply capacity-management problem is handling the considerable variation in gas use that accompanies the natural variation in the Company's load. Three tables illustrate the problem. The first shows gas consumption by plant for each of the Company's generating stations with gas-fired capacity for 2008, 2009 and the first three months of 2010. As the table shows, gas use at a particular station can vary by as much as 50 percent from one year to the next.

**Table IV.4**  
**Gas Consumption by Generating Station (MMBtu)**

Generating Plant	2008	2009	Jan-Mar 2010
Carlsbad GT	13,296	8,834	3,960
Cunningham GT	2,081,914	847,948	0
Cunningham	13,099,563	9,279,659	1,830,628
Harrington	195,612	247,024	172,687
Jones	15,835,282	18,901,798	4,222,404

#### **4. Fuel Oil Supply Management**

As noted in the chapter on Fuel Supply Contracting, SPS has two generating plants that maintain inventories of fuel oil for use as back-up fuel in the event that gas supplies fail. (Diesel fuel is also maintained at the Tucumcari Generating Station, but for a different contingency). We also noted that SPS has two tanks at each of the two plants, and that its operating philosophy is to maintain an inventory at each site equivalent to the capacity of one of the tanks on each site. SPS reports that Gas Supply Operations personnel monitor the fuel oil inventories through a monthly inventory report from Accounting that shows the inventory level for each plant. When the plants are being dispatched on fuel oil, the Gas Buyer or the Manager of Gas Supply monitors the fuel oil inventory levels directly with each plant daily.

#### **5. Generation Fuel Price Risk Management**

The Company reports that it does not engage in financial hedging for coal or natural gas. Moreover, gas storage is primarily for operations, not for physical hedging.

### **D. Conclusions**

#### **1. SPS's processes and procedures for the weighing, sampling and analysis of coal shipments delivered to its Harrington and Tolk Generating Stations are appropriate.**

SPS's coal supply arrangements with TUCO sufficiently provide for sampling and analysis of fuel delivered to the Harrington and Tolk Generating Stations. Coal weights are determined by certified scales at the stations, and coal qualities are determined by samples taken at the stations in accordance with ASTM procedures.

#### **2. Coal inventory is maintained by TUCO in a manner that has been satisfactory.**

SPS has established coal inventory targets for TUCO. The Harrington target level is 40 days of coal supply, and TUCO has maintained inventory levels above this target since March 2008. The Tolk target level is 46 days of coal supply, and TUCO has maintained inventory levels above this target, except for slight dips below the target in September 2008 and January 2009. Overall, SPS has been satisfied with TUCO management of coal inventory levels.

#### **3. SPS has effectively administered its coal contracts.**

Administration of coal contracts is a complex and demanding business. Contracts must be managed in ways that ensure delivery of the appropriate quantities and qualities of coal in accordance with agreed upon schedules, while at the same time maintaining appropriate relationships between the Company and its coal suppliers. The job requires experience and skill, and good communication. SPS has been effective in communicating internally on all aspects of coal scheduling and deliveries on a regular daily basis. Overall, SPS has demonstrated that it has been effective in all aspects of coal contract administration.

SPS has acted appropriately to manage the various quality provisions of its coal contracts, and has taken action as necessary to monitor quality and assess penalties, when coal quality variations have warranted such actions.

**4. SPS's gas supply-capacity management is satisfactory.**

SPS has to maintain enough gas-supply capacity to supply its generating units at their maximum output, but also has to deal with considerable variation in the utilization of each unit. SPS has a good mix of people, facilities and management practices for dealing with this task.

**5. SPS's gas commodity-supply processes are also satisfactory.**

Liberty reviewed the Company's approach to commodity supply management, and each of the forecasts and competition materials (RFPs, bid response sheets, bid comparison worksheets) that it uses in administering the competitions. We found all of these to be well-designed and utilized effectively.

**E. Recommendations**

Liberty has no recommendations in this area.



## TUCO 2013 Coal Supply

#14-008

Vendor Audit Report  
July 25, 2014

Audit Services – Justin Deese, David Justice  
& Kirk Ellison  
Business Area: Fuels  
Sponsor: Tom Imbler

EXECUTIVE SUMMARY	HIGH RISK OBSERVATION/OPPORTUNITY	MEDIUM RISK OBSERVATION/OPPORTUNITY	LOW RISK OBSERVATION/OPPORTUNITY
<p><b>BACKGROUND</b></p> <p>In 1979, Southwestern Public Service Company (SPS) entered into multi-year Coal Supply Agreements with TUCO Inc. to supply coal to SPS' Harrington and Tolk power generation stations. Under the agreements, TUCO is allowed to recover from SPS expenses incurred for mine, transportation, handling, interest, and other pass-through costs, as well as a specified margin, for coal delivered to the Harrington and Tolk stations.</p> <p>TUCO maintains coal supply agreements with ARCH Coal Sales, Cloud Peak Energy Resources, and Peabody Coal Sales. To support the SPS contract requirements, TUCO has also established a multi-year coal transportation agreement with Burlington Northern and Santa Fe Railroad (BNSF) and a coal handling service agreement with Savage Energy Services (Savage).</p> <p>The TUCO/SPS contract to supply coal to Harrington runs through 12/31/2016, and the contract to supply coal to Tolk runs through 12/31/2017.</p> <p><b>OBJECTIVE AND SCOPE</b></p> <p>The objectives of this audit were to ensure compliance with coal supply, handling and transportation contract terms and the pass through components included in the monthly TUCO invoices and to review the vendor payment process to ensure that payments made by TUCO to its suppliers were timely and accurate. TUCO's independent accountants report on applying agreed upon procedures, as of 12/31/2012, regarding Savage has yet to be finalized; therefore, the report was not reviewed by Audit Services.</p>	<p>The scope of this audit included a review of fuel costs charged by TUCO to SPS for the period from October 1, 2012 to December 31, 2013 in the amount of approximately \$371MM.</p> <p><b>OVERALL ASSESSMENT</b></p> <p>Through review of the 2013 TUCO invoices and supporting documentation, we noted that the charges to SPS were generally in compliance with contract terms and conditions and that costs were accurately passed through to SPS by TUCO.</p> <p><b>OBSERVATIONS AND RECOMMENDATIONS / OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>● <b>Savage Agreed-Upon Procedures Report (low – see <a href="#">p.2</a>)</b></li> </ul> <p>As we noted in the scope section the December 31, 2012 Agreed Upon Procedures Report for the contract between TUCO, Inc. and Savage Energy Services was not issued in time for their review in June of 2014.</p> <p><i>Audit Services encourages TUCO to monitor the professional services firm hired to perform the Agreed-Upon Procedures and Savage Energy Services to ensure timely completion of the report.</i></p>		

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## TUCO 2013 Coal Supply

#14-008

Vendor Audit Report

July 25, 2014

Audit Services – Justin Deese, David Justice

& Kirk Ellison

Business Area: Fuels

Sponsor: Tom Imbler

**Auditors Note:** Audit Services noted a coal burn adjustment during the inventory testing at TUCO's fiscal year end. Through discussions with TUCO employees it was discovered that, at times, the adjustment to the coal burn required TUCO to modify its inventory and subsequently its invoice to SPS.

- Two physical inventory measurements of the Harrington station were performed and resulted in an inventory adjustment of approximately \$5.9MM. The exact cause of the adjustment is still being investigated by management.
- TUCO had Savage replace the scales at both stations and is comparing Savage measurements with Xcel Energy data each month.
- SOX Control SPS CM 5 monitors the completion of quarterly calibrations of the feeder measuring devices at the two plants. The control is in place and is operating as designed. The control verified that there were quarterly calibrations during the 2013 year.

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## TUCO 2013 Coal Supply

#14-008

Vendor Audit Report

July 25, 2014

Audit Services – Justin Deese, David Justice

& Kirk Ellison

Business Area: Fuels

Sponsor: Tom Imbler

### DETAILED OBSERVATIONS AND RECOMMENDATIONS / OPPORTUNITIES

[Back to Executive Summary](#)

#### Savage Agreed-Upon Procedures Report

##### OBSERVATION

The December 31, 2012 Agreed-Upon Procedures Report to analyze the request for reimbursement from Savage Energy Services to TUCO, Inc was not completed in time for Audit Services' fieldwork in June of 2014. Audit Services typically reviews the Agreed-Upon Procedures Report for exceptions noted by the independent accountants performing the work and investigates those exceptions. Since the 2012 report was not completed in a timely manner our review did not occur.

##### BUSINESS IMPACT

Regulators receive, usually through discovery or testimony, the Xcel Energy internal audit and the Agreed-Upon Procedures Report and review them in various regulatory proceedings initiated by the PUCT and other regulatory bodies. Since Audit Services was not able to review and investigate any exceptions noted in the report, there is a risk that there are issues of contract non-compliance between Savage Energy Services and TUCO, Inc. of which Xcel Energy is unaware.

##### RECOMMENDATION / OPPORTUNITY

*Audit Services encourages TUCO to monitor the professional services firm hired to perform the Agreed-Upon Procedures and Savage Energy Services to ensure timely completion of the report. Audit Services will review the results of the Report upon its completion.*

### REPORT DISTRIBUTION LIST

T. Imbler, VP Commercial Operations  
H.C. Romer, Director Fuel Supply Operations  
J. Marshall, Coordinator Principal Fuel Portfolio

B. Fowke, Chairman, President & CEO  
K. Larson, SVP Operations  
T. Madden, SVP & CFO  
R. Hill, President & CEO – SPS  
J. Savage, VP & Controller  
D. Wendell, VP & CAE  
Deloitte & Touche

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**NEXGEN COAL SERVICES, LLP**  
Amarillo, Texas

**AGREED-UPON PROCEDURES**  
December 31, 2013



CliftonLarsonAllen LLP  
CLAAconnect.com

**INDEPENDENT ACCOUNTANTS' REPORT  
ON APPLYING AGREED-UPON PROCEDURES**

To the management of NexGen Coal Services, LLP  
Amarillo, Texas

We have performed the procedures attached in Exhibit A which were agreed to by NexGen Coal Services, LLP ("NexGen") on behalf of TUCO, Inc. ("TUCO"), and Xcel Energy (the specified parties), solely to assist you with respect to the evaluation of the Savage-Harrington Energy Services and Savage-Tolk Energy Services (collectively referred to as "Savage") expense reimbursements for the year ended December 31, 2013. Management of Savage is responsible for maintaining the accuracy of the request for reimbursements. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of the specified parties in this report. Consequently, we make no representation regarding the sufficiency of the procedures described in the attached exhibit, either for the purpose for which this report has been requested or for any other purpose.

Findings noted as a result of the procedures performed are described in the attached exhibit to this report.

We were not engaged to, and did not conduct an examination, the objective of which would be the expression of an opinion on the request for reimbursements from Savage. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of management of NexGen and Xcel Energy and is not intended to be and should not be used by anyone other than these specified parties.

*CliftonLarsonAllen LLP*

**CliftonLarsonAllen LLP**

Denver, Colorado  
March 13, 2015



**EXHIBIT A**

**NEXGEN COAL SERVICES, LLP  
AGREED-UPON PROCEDURES  
FOR THE YEAR ENDED DECEMBER 31, 2013**

Our procedures and findings are as follows:

1. We obtained the monthly requests for reimbursement presented to TUCO by Savage and performed the following:
  - a. Recalculated the request for reimbursement for mathematical accuracy.
  - b. For each month, selected all individual invoices from outside vendors over \$10,000 and judgmentally selected individual invoices under \$10,000 from outside vendors for a total sample of 30 individual invoices per month per each location (total sample of 720 for the year).
  - c. For each month, selected all invoices internally generated by Savage.

No exceptions were noted during performance of the above listed procedures.

2. For each sample selected in 1b and 1c above, we performed the following:
  - a. Obtained image of cancelled check, bank wire transfer documentation or paid purchase card statement (*something that provides definitive proof of payment*) and compared amount to request for reimbursement. No exceptions noted.
  - b. Obtained supporting documentation for each individual invoice selected and agreed to the request for reimbursement. No exceptions noted.
  - c. Obtained supporting documentation for invoice amounts internally generated by Savage and agreed to the request for reimbursement. No exceptions noted.
3. For payroll and payroll related expenses, we tested all twelve (12) months for the year ended December 31, 2013 as follows:
  - a. Obtained monthly reports from Savage reconciling the payroll and payroll-related expenses from the Savage request for reimbursement to the payroll registers (ADP reports and Zion's ZB accounts).
  - b. Compared amounts billed to TUCO for payroll related expenses (i.e. benefits) to supporting documentation.
  - c. Obtained a schedule detailing the rate of pay for each hourly employee for each pay period during 2013. Compared pay rates to supporting documentation authorizing the rate of pay for each hourly employee for each pay period during 2013.

**EXHIBIT A**

The following exceptions related to steps 3a and 3b were noted as follows:

	<b>Harrington and Tolk Total</b>
Total request	\$ 7,420,178.03
Less pension	<u>1,000,000.08</u>
Net per request	6,420,177.95
Per ADP reports	(5,349,437.19)
Workers compensation insurance	(199,689.60)
Fringe benefits	<u>(882,249.32)</u>
<b>Difference</b>	<b><u>\$ (11,198.16)</u></b>

4. For each month in 2013, selected ten (10) non-salaried individuals (total of 120 selections) and compared the hours listed on the payroll registers to underlying time records for the specified month. Determined that there was a total of 33.5 hours over billed to TUCO from this sample, representing \$1,133.
5. For pension expenses, we performed the following:
  - a. From the population of pension plan participants, we judgmentally select ten (10) employees from each plant for testing (20 selections).
  - b. Compared the annual compensation provided to the Plan Actuary for those selected for testing to the Annual Summary and ADP Payroll Report without exception
  - c. Obtained the Plan Actuary Report as of January 1, 2013 and compared the required funding of the Plan for 2013 to the amount billed to TUCO. We agreed amounts billed to TUCO to contributions reported in the Plan Actuary Report without exception.
6. For property tax and insurance expenses we performed the following:
  - a. Obtained all property tax renditions and property tax statements applicable to the calculations requested for reimbursement by Savage.
  - b. Obtained reconciliations of amounts requested by Savage for reimbursement to actual property tax statements and renditions.
  - c. Compared amounts billed to TUCO for property taxes and agreed to supporting documentation.

The following is owed to TUCO based on steps 6a, 6b and 6c performed above:

	<b>Harrington</b>	<b>Tolk</b>
Amounts paid by Savage for property taxes	\$ 347,600.00	\$ 436,487.60
Amounts billed to TUCO for property taxes	<u>383,821.82</u>	<u>450,868.37</u>
Difference – due to TUCO	<b><u>\$ (36,221.82)</u></b>	<b><u>\$ (14,380.77)</u></b>

**EXHIBIT A**

- d. Obtained a summary and all support (such as paid invoices, reconciliations, allocation schedules, etc.) for all amounts related to insurance that have been requested for reimbursement by Savage. Compared amounts of insurance requested for reimbursement to support provided by Savage. The amounts billed and reimbursed by TUCO for insurance were more than the reported amounts paid by Savage during 2013 by \$5,359.77.
  - e. Obtained insurance certificates for all policies for which Savage has requested reimbursement. Verified that TUCO is named as an additionally insured entity on each certificate without exception.
7. Obtained a schedule of capital expenditures identifying items and/or projects exceeding \$50,000 with expenditures occurring during 2013. Verified approval of each item by reviewing the capital expenditure request letters signed by both Savage and TUCO personnel. Prepared the below report showing the capital request, approval, the amount requested, expenditures occurring during 2013, expenditures occurring before 2013, and the variance between the amounts requested and expenditures incurred:

CapEx	Project Name	Company	Actual Amount	Amount Approved	Difference Between Amount Approved and Actual		Approval Date	Completion Date
HARRINGTON								
13-002H	3 Belts	Applied Industrial	\$ 57,431.33	\$ 54,141.92	\$ (3,289.41)	12/5/2012	2013	
13-012H	R&M on Harrington Crusher Build.	Altura Engineering	126,210.92	126,210.92	-	8/30/2013	2013/2014	
13-014H	221/231 Conveyor belt	Texas Bearing	60,592.33	60,592.33	-	9/19/2013	2013	
Total (under)/over approved					\$ (3,289.41)			
TOLK								
13-015T	Office Roof Replacement	Fortenberry Roofing	\$ 60,688.00	\$ 60,688.00	\$ -	5/8/2013	June 2013	
13-006T	3A conveyer belt	Applied Industrial	93,972.32	92,607.40	(1,364.92)	1/9/2013	April 2013	
13-001T	Unit Two Lighting	Brandon and Clark	121,164.23	111,930.00	(9,234.23)	1/9/2013	February 2013	
13-010T	2 Michelin Tires	T&W	52,057.30	61,649.04	9,591.74	4/19/2013	May 2013	
13-022T	6B Conveyor Belt	Applied Industrial	112,582.45	112,582.45	-	7/25/2013	2013	
Total (under)/over approved					\$ (1,007.41)			