

# Memorandum

**To:** Commissioners

**CC:** PUD, Legal, Dave Sederquist

**From:** Mike Diller *Mike Diller*

**Date:** November 15, 2011

**Re:** Close NSP's 2004 – 2010 Electric Annual Reports

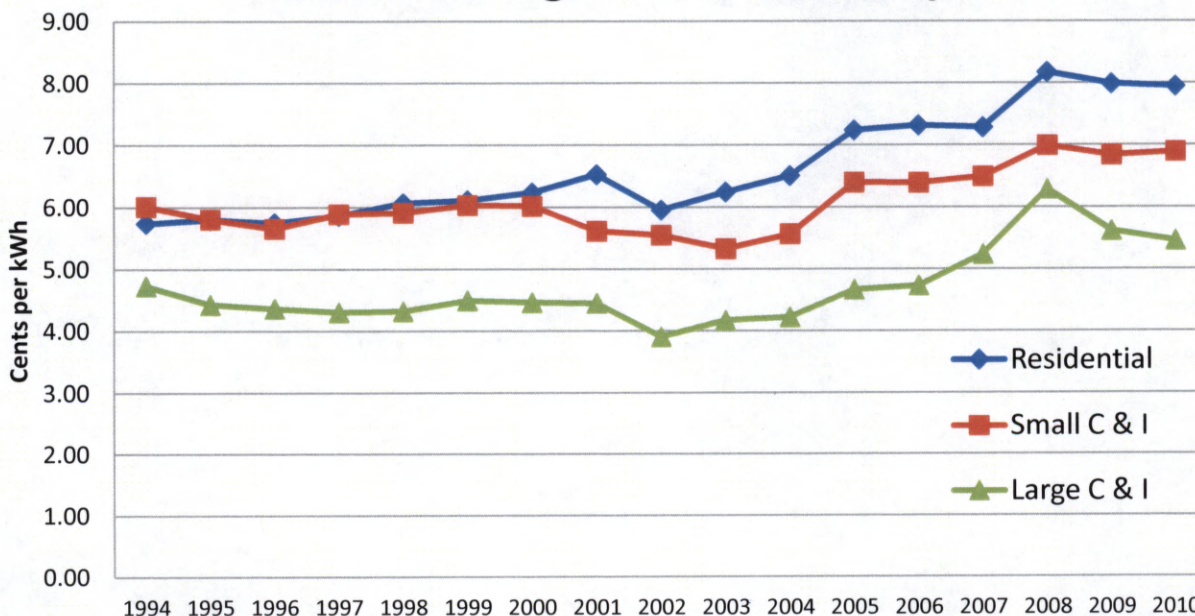
*Case Nos. PU-05-265, PU-06-189, PU-07-181, PU-08-211, PU-09-191 & PU-10-153*

I have reviewed Northern States Power Company's Electric Annual Reports and recommend the cases be closed in accordance with commission policy 5-05-97. I am providing this to Dave Sederquist in the event NSP would like to comment on my recommendation. After sufficient time has passed to receive comments, staff will prepare a motion to close the cases.

Rates

NSP Electric consumers have enjoyed a long period of stable "base" rates. Aside from NSP's current electric rate increase applications for 2011 and 2012, NSP has only asked for a base rate increase one time (2007) since 1993. However, rates are also impacted by riders such as the fuel clause adjustment. The following chart takes into consideration all changes to rates by depicting total revenues divided by total kWh's sold.

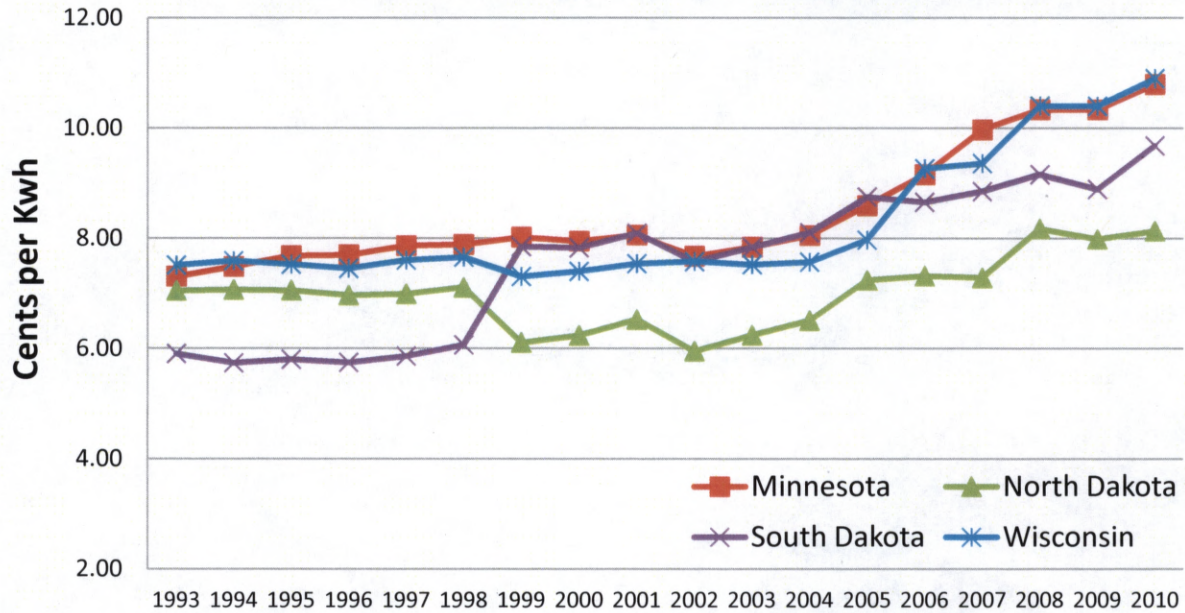
**NSP ND Average Cost of Electricity**



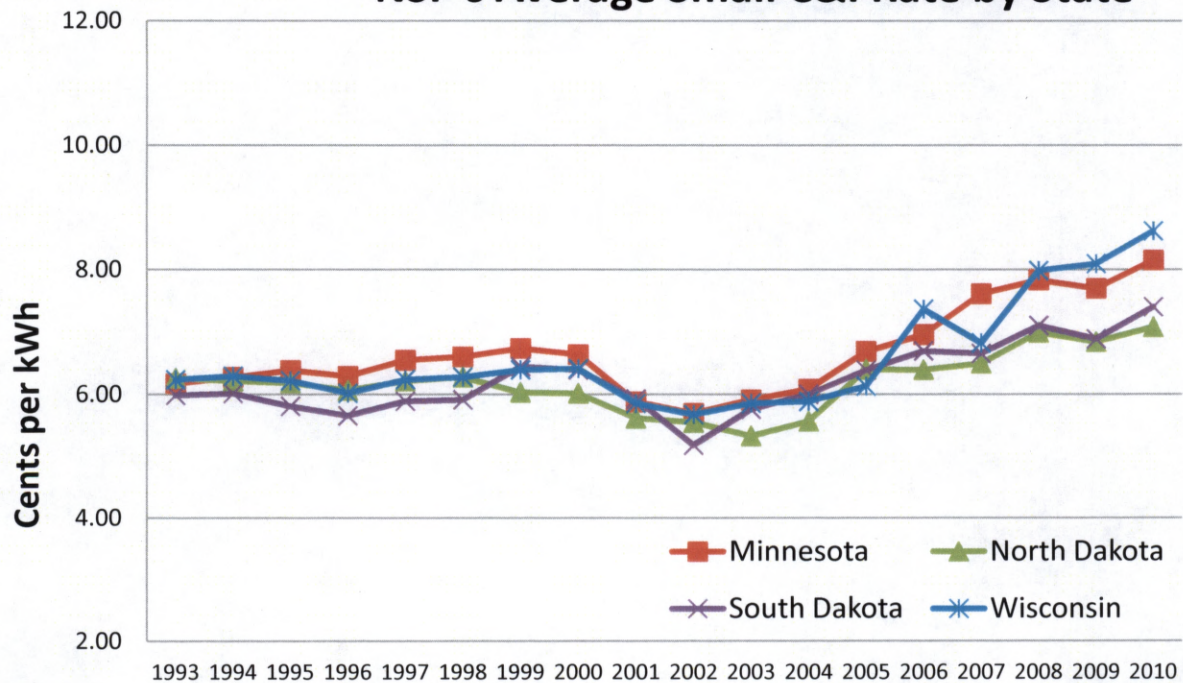
3 PU-09-191 Filed 11/15/2011 Pages: 6  
 Memo closing NSP's 2004-2010 electric annual reports  
 Public Service Commission  
 4 PU-10-153 Filed 11/15/2011 Pages: 6  
 Memo closing NSP's 2004-2010 electric annual reports  
 Public Service Commission

Another way to compare rates is to look at the average rates by state within the same company, as follows:

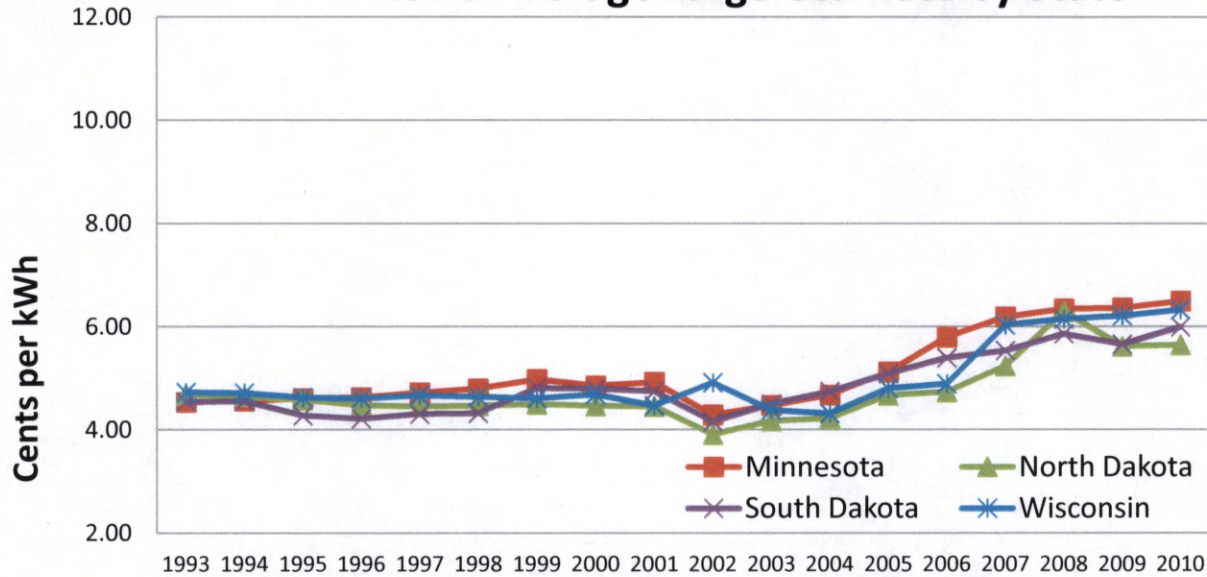
### NSP's Average Residential Rate by State



### NSP's Average Small C&I Rate by State



### NSP's Average Large C&I Rate by State



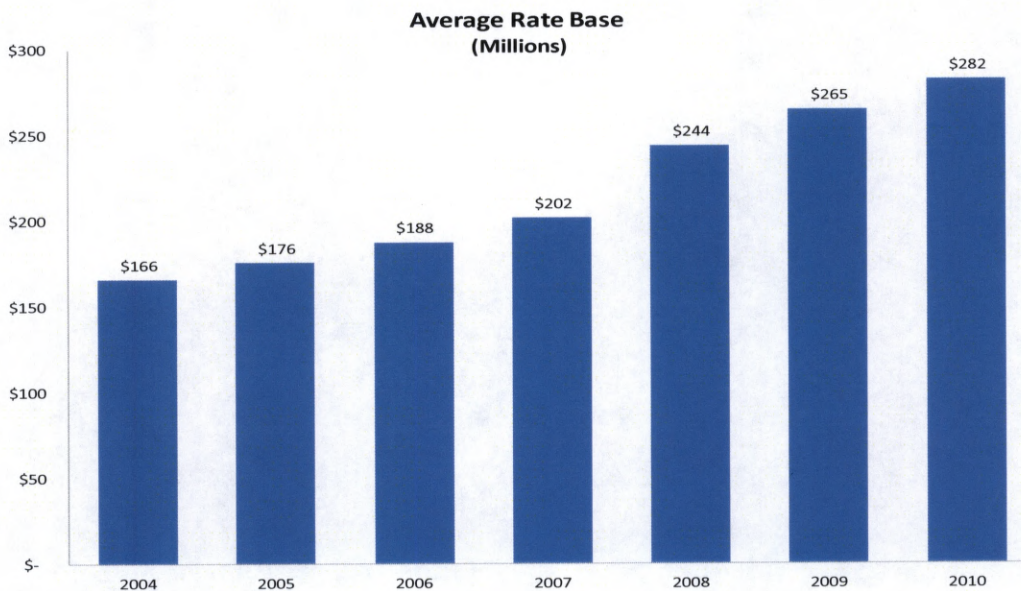
Finally, the following worksheet compares NSP rates with other North Dakota retail suppliers.

| North Dakota Public Service Commission<br>Average Retail Price in North Dakota (cents/kWh)<br>Total Revenues Divided by Total Sales | EIA, Table 10<br>Avg. Retail Price<br>All Sectors |             |             |             |             |             |
|---|---|-------------|-------------|-------------|-------------|-------------|
|   | 2004  | 2005        | 2006        | 2007        | 2008        | 2009        |
| <b>Power Suppliers</b>  |   |             |             |             |             |             |
| 1 City of Hope  | 5.59  | 9.05        | 5.03        | 5.45        | 4.65        | 5.18        |
| 2 Slope Electric Coop Inc   | 4.62  | 4.50        | 4.35        | 4.82        | 4.59        | 5.67        |
| 3 Dakota Valley Elec Coop Inc   | 5.08  | 5.13        | 5.08        | 5.09        | 5.24        | 5.84        |
| 4 City of Valley City   | 4.52  | 4.57        | 5.06        | 5.30        | 5.72        | 5.97        |
| 5 City of Maddock   | 6.76  | 6.08        | 6.67        | 6.85        | 6.07        | 6.00        |
| 6 McKenzie Electric Coop Inc  | 5.83  | 5.67        | 6.04        | 7.28        | 6.22        | 6.18        |
| 7 Roughrider Electric Cooperative   |   |             |             | 7.06        | 5.32        | 6.21        |
| 8 Nodak Electric Coop Inc   | 5.39  | 5.70        | 5.46        | 5.64        | 5.69        | 6.23        |
| 9 City of Lakota  | 4.25  | 4.26        | 5.14        | 5.13        | 5.67        | 6.29        |
| 10 City of Stanton  | 5.74  | 5.54        | 5.76        | 5.56        | 5.83        | 6.30        |
| 11 City of Hillsboro  | 4.51  | 4.65        | 5.14        | 5.13        | 5.72        | 6.36        |
| 12 Verendrye Electric Coop Inc  | 5.76  | 5.71        | 5.70        | 5.81        | 6.05        | 6.46        |
| 13 Mountrail-Williams Elec Coop   | 6.47  | 6.26        | 6.16        | 6.06        | 6.49        | 6.73        |
| 14 City of Sharon   | 5.67  | 5.56        | 6.32        | 7.36        | 8.27        | 6.81        |
| 15 <b>Montana-Dakota Utilities Co</b>   | <b>6.55</b>                                       | <b>6.47</b> | <b>6.83</b> | <b>6.66</b> | <b>7.35</b> | <b>6.83</b> |
| 16 Northern Plains Electric Coop  | 6.15  | 6.24        | 6.25        | 6.30        | 6.44        | 6.87        |
| 17 <b>Otter Tail Power Co</b>   | <b>6.19</b>                                       | <b>6.66</b> | <b>6.72</b> | <b>5.40</b> | <b>7.16</b> | <b>6.90</b> |
| 18 Grafton City of  | 5.17  | 5.29        | 5.29        | 5.71        | 6.54        | 6.92        |
| 19 <b>Northern States Power Co</b>  | <b>5.69</b>                                       | <b>6.44</b> | <b>6.46</b> | <b>6.58</b> | <b>7.33</b> | <b>7.14</b> |
| 20 McLean Electric Coop, Inc  | 7.37  | 7.37        | 7.53        | 6.12        | 6.60        | 7.17        |
| 21 Cass County Electric Coop Inc  | 6.14  | 6.29        | 6.45        | 6.70        | 6.71        | 7.20        |
| 22 Lower Yellowstone R E A, Inc   | 7.94  | 7.80        | 7.36        | 7.01        | 6.34        | 7.22        |
| 23 North Central Elec Coop, Inc   | 6.44  | 6.47        | 6.53        | 6.48        | 6.89        | 7.22        |
| 24 Capital Electric Coop, Inc   | 7.12  | 7.00        | 6.96        | 7.01        | 7.02        | 7.37        |
| 25 City of Cavalier   | 5.14  | 5.74        | 5.74        | 6.27        | 6.79        | 7.40        |
| 26 City of Northwood  | 5.88  | 6.34        | 6.82        | 7.52        | 7.07        | 7.47        |
| 27 City of Park River   | 5.92  | 6.04        | 6.31        | 6.78        | 6.74        | 7.69        |
| 28 City of Riverdale  | 5.65  | 5.84        | 6.46        | 5.39        | 4.15        | 8.05        |
| 29 Cavalier Rural Elec Coop, Inc  | 7.19  | 7.60        | 8.07        | 8.54        | 8.61        | 8.33        |
| 30 Sheridan Electric Coop, Inc  | 8.29  | 8.39        | 8.22        | 8.04        | 7.72        | 8.57        |
| 31 KEM Electric Coop Inc  | 8.15  | 7.98        | 7.95        | 7.82        | 8.69        | 8.58        |
| 32 Goldenwest Electric Coop, Inc  | 8.77  | 8.57        | 8.30        | 8.23        | 8.27        | 8.71        |
| 33 Traverse Electric Coop, Inc  | 7.84  | 7.52        | 7.93        | 8.11        | 8.14        | 8.83        |
| 34 Burke-Divide Electric Coop Inc   | 7.36  | 7.37        | 7.37        | 7.99        | 8.52        | 8.88        |
| 35 Mor-Gran-Sou Electric Coop Inc   | 7.48  | 7.51        | 8.18        | 8.25        | 9.42        | 10.55       |
| 36 Oliver-Mercer Elec Coop Inc  | 5.78  | 5.66        | 5.44        |             |             |             |
| 37 West Plains Electric Coop Inc  | 6.24  | 6.20        | 5.61        | 5.74        |             |             |

As can be noted from the above worksheet, NSP was the 12<sup>th</sup> cheapest electric provider in North Dakota in 2004 ahead of the other two North Dakota investor owned utilities (MDU and OTP) but behind eight cities and 3 cooperatives. Based on the most recent available year end data, NSP has fallen to #19 for the year ended 2009 behind MDU and OTP, eight cities and eight cooperatives. Generally speaking, NSP's North Dakota rates are much lower than rates charged by NSP in its other jurisdictions. However, the trend in rates compared to other North Dakota suppliers is not good and will likely get worse given NSP's current rate case filings and planned investments.

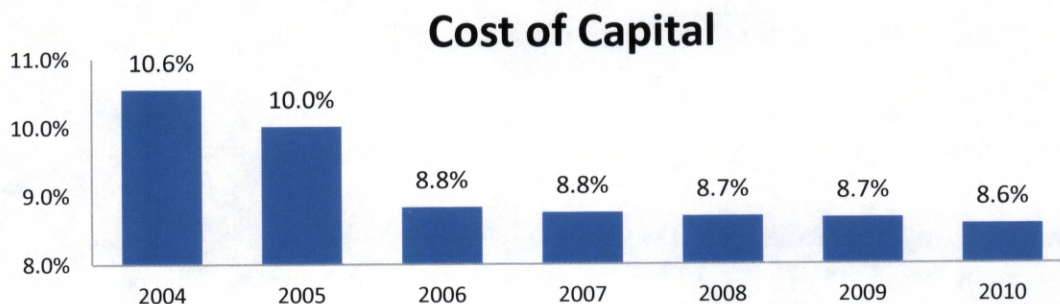
Rate Base

It is safe to say that NSP's continued investment in wind projects and transmission, coal to gas conversions and nuclear plant uprates will continue to negatively impact NSP's rates. The following illustrates the increased levels of investment; and this is just the beginning. The 2012 average rate base for North Dakota is expected to exceed \$320 million.



Cost of Capital

While NSP's investment in plant continues to rapidly increase, its cost of financing continues to decline. Short-term debt has been available to NSP at less than 1% during 2009 and 2010. The company continues to refinance its long-term debt when possible carrying an average interest rate of 6.3%. Assuming cost of equity rates approved by the commission, the following chart depicts the recent changes in NSP's cost of capital.



NOI

NSP's reported Net Operating Income follows:

| <u>Description</u>   | <u>2004</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> | <u>2008</u> | <u>2009</u> | <u>2010</u> |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Revenues       | \$ 152,108  | \$ 173,006  | \$ 181,045  | \$ 189,737  | \$ 202,375  | \$ 196,416  | \$ 196,820  |
| Production Expense   | 82,262      | 100,289     | 107,776     | 123,221     | 121,265     | 111,422     | 127,106     |
| Gross Margins        | \$ 69,846   | \$ 72,717   | \$ 73,269   | \$ 66,516   | \$ 81,110   | \$ 84,994   | \$ 69,714   |
| Transmission Expense | 6,190       | 5,922       | 6,621       | 7,618       | 8,333       | 9,301       | 9,725       |
| Distribution Expense | 4,310       | 4,127       | 4,792       | 5,426       | 5,305       | 5,612       | 5,779       |
| Customer Billing     | 3,877       | 4,194       | 4,677       | 4,619       | 4,757       | 4,583       | 4,394       |
| Customer Service     | 270         | 296         | 271         | 312         | 362         | 280         | 262         |
| Sales & Marketing    | 73          | 12          | 4           | 4           | 3           | 50          | 151         |
| Admin. & General     | 9,510       | 9,649       | 10,520      | 10,383      | 11,612      | 12,070      | 12,374      |
| Depreciation         | 17,091      | 18,821      | 19,533      | 18,105      | 14,024      | 14,892      | 15,981      |
| Property Taxes       | 5,173       | 4,999       | 5,607       | 4,903       | 4,898       | 5,065       | 5,585       |
| Other General Taxes  | 2,540       | 1,076       | 1,105       | 1,179       | 1,561       | 1,743       | 1,731       |
| Income Tax Expense   | 5,771       | 6,519       | 5,744       | 3,786       | 9,199       | 9,689       | 2,068       |
| Net Operating Income | \$ 15,041   | \$ 17,102   | \$ 14,395   | \$ 10,181   | \$ 21,056   | \$ 21,709   | \$ 11,664   |

As you can note from the above worksheet, gross margins (revenues less production expense) increased significantly in 2008. The increase was primarily due to a \$17.1 million interim rate increase effective February 5, 2008, Case No. PU-07-776.

Another significant variance occurred in 2010 where gross margins went down significantly. While some of the reduction may be attributable to the economic downturn, most of the decline was due to an accounting error. Beginning in 1992, NSP determined that the fuel portion of base rates represented current fuel cost recoveries and that the fuel clause rider revenues represented a fuel cost regulatory lag. As a result, the company began recording an asset for what it believed was a regulatory lag to be collected from ratepayer later. This went on for many years resulting in a rather large deferred fuel expense balance until it was discovered that, while our fuel clause adjustment is based on historical averages and contains a true-up mechanism, the FCA still recovers "current" fuel costs. The discovery occurred when SD moved to include all fuel costs in the FCA rather than setting a certain level of fuel recovery in base rates causing its deferred fuel cost balance to soar.

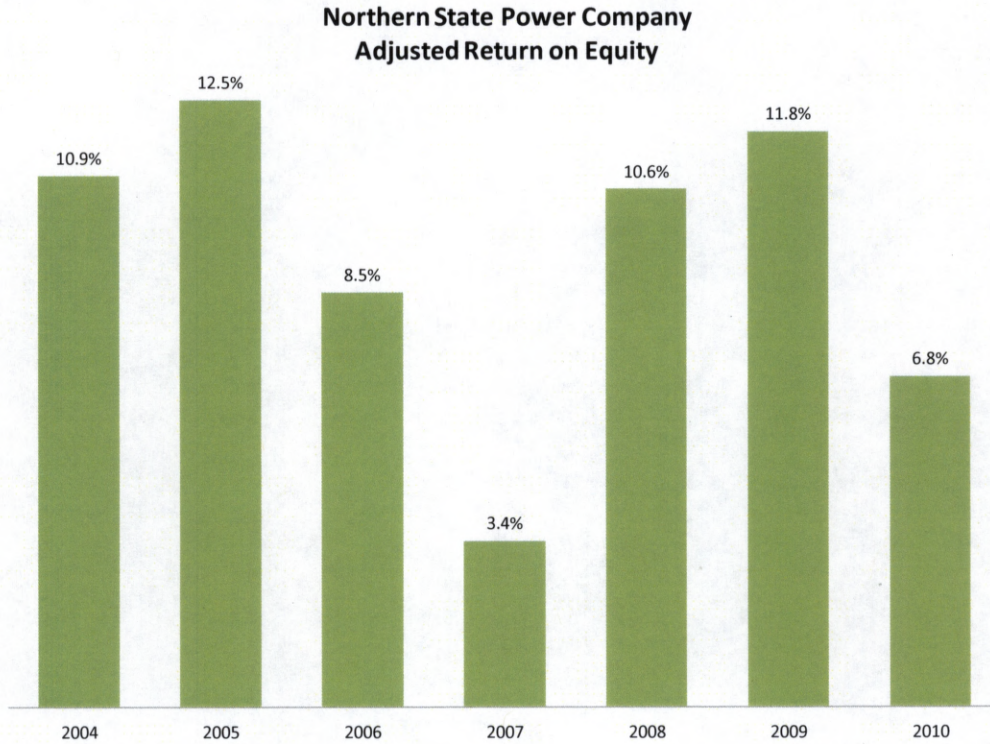
When you create a deferred fuel asset on the books the opposite side of the ledger requires a credit to fuel expense. So over the years, fuel expense was understated for financial reporting purposes. The correcting journal entry requires the opposite reaction or a very large fuel expense increase to write off the false asset.

In 2010, NSP wrote off approximately \$15.6 million of deferred fuel costs in the North Dakota retail electric jurisdiction. About \$4.5 million related to 2009 business was reflected in our 2009 Annual Report of Regulated Earnings (filed in May, 2010), and the other \$11.1 million was reflected in our 2010 report. As a result, the reported ROE for 2010 of 2.2% should be 6.8%. The 2009 ROE is also understated by about 2%.

The other significant variance in depreciation expense beginning in 2008 resulted from the Settlement Agreement in Case No. PU-07-776 extending the service lives of generation assets and lowering depreciation expense related to distribution and transmission assets.

Return on Equity

NSP's investments in electric plant paired with cost of capital and net operating income resulted in the following rates of return earned on its shareholder equity. Please note that 2009 and 2010 results we adjusted to reflect the deferred fuel adjustment discussed above.



Recommendation to Close Cases

Staff has reviewed the 2004 through 2010 annual reports and recommends the cases be closed without further ado. During this time period, a rate increase application was filed in 2007 which has been heard and ordered on by the commission. In addition, a rate increase application has been filed by NSP for 2011 and 2012 whereby staff filed testimony and entered into a settlement agreement. The reviews conducted during this time period are sufficient.