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May 15, 2008

Ms. Illona Jeffcoat-Sacco  
Executive Secretary  
North Dakota Public Service Commission  
State Capitol - 600 East Boulevard  
Bismarck, ND 58505-0480

RE: Review of Otter Tail Power Company's Fuel Clause  
Case No. PU-08-130

Dear Ms. Jeffcoat-Sacco:

In the fall of 2007, Otter Tail Power Company's Big Stone generating plant was scheduled to be off-line for a planned outage to perform some critical maintenance and repairs. When the scheduled work was delayed and extended, the end of the outage was pushed into December when the cost of replacement energy was higher, and the weather was colder, than would have been expected under the original schedule. When this higher cost of replacement energy became part of Otter Tail's fuel clause adjustment (FCA) early in 2008, the FCA was unusually high, particularly for the months of February through April.

On March 26, 2008, the Commission requested Otter Tail to engage an external auditor to audit the company's FCA and the events surrounding the Big Stone outage. Otter Tail inquired of Deloitte & Touche LLC, the CPA firm that audits Otter Tail's financial information for external reporting. This firm also conducts the annual audit of Otter Tail's FCA and submits a report to the Commission as required by North Dakota Rule 69-09-02-39 (12). Deloitte informed Otter Tail that it could not conduct the review requested for several reasons that it stated in a letter to Otter Tail dated April 9, 2008, and which Otter Tail has provided to the Commission staff.

In a letter to Mike Diller of Commission staff dated April 16, 2008, Otter Tail discussed the inability of any CPA firm to conduct the desired audit and suggested that, as a step toward providing the desired additional information to the Commission, Otter Tail would provide by May 15 a report detailing the events surrounding the plant outage and its effect on Otter Tail's FCA. The Commission could then schedule an Informal Hearing (which it has now done) at which representatives of Otter Tail would appear to answer the Commission's questions.

Ms. Ilona Jeffcoat-Sacco  
May 15, 2008  
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As promised, Otter Tail is enclosing a Report of the events surrounding the Big Stone Plant outage and the effect on our FCA. Documentation supporting the information contained in the report is available; however, much of it is confidential or trade secret. This report is designed to be a public document. Otter Tail will, of course, make additional information available under trade secret protection if necessary or for review by Commission staff at Otter Tail's offices. And Deloitte will be conducting its annual audit of Otter Tail's FCA this summer. That audit will be filed with the Commission in September and will cover the period July 1, 2007, through June 30, 2008, which includes the cost of energy during the months under discussion in this case.

I am also forwarding an electronic copy of this letter and the enclosed report in pdf format by email to you at [ijs@nd.gov](mailto:ijs@nd.gov) and to [ndpsc@nd.gov](mailto:ndpsc@nd.gov).

We plan to have several Otter Tail representatives present at the May 28 Informal Hearing. If you have questions on the information provided, don't hesitate to contact me at (218) 739-8289 or [bbrutlag@otpc.com](mailto:bbrutlag@otpc.com).

Very truly yours,



Bernadeen Brutlag  
Manager, Regulatory Services

Enclosure

C: Mike Diller

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**REPORT**  
**ON**  
**BIG STONE PLANT 2007 PLANNED OUTAGE**

**MAY 15, 2008**



## **REPORT ON BIG STONE PLANT 2007 PLANNED OUTAGE**

### **I. Introduction**

This Report has been prepared for two purposes: it documents for internal purposes the events surrounding the fall 2007 planned outage of Big Stone Plant and the impact of that outage on Otter Tail Power Company (“Otter Tail”) and its customers. In addition, it provides a summary of those events, along with management decision options, that Otter Tail believes provides a useful explanation for state regulators concerning the outage and its impact on rates.

The outage and its consequences involved protracted events and, in some cases, highly technical matters. This Report is the result of an effort to summarize those events and matters.

### **II. Executive Summary**

In the fall of 2007, Otter Tail’s Big Stone Plant,<sup>1</sup> located in northeastern South Dakota, was scheduled to be shut down to rewind the generator, finish replacing the emission control system, and in the same time period perform a number of maintenance items that can only be done when the plant is off-line. The original outage was scheduled to begin September 6, 2007, and conclude six weeks later.

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<sup>1</sup> Big Stone generating plant is a 475 MW plant placed in service in 1975 and jointly owned by Otter Tail Corporation d/b/a Otter Tail Power Company (53.9%), Montana-Dakota Utilities Co., a division of MDU Resources Group, Inc., (22.7%) and NorthWestern Corporation (23.4%). Otter Tail Power Company operates the plant. Cost and operating statistics in this Report are for the total plant, unless otherwise indicated.

Alstom Power Inc., (“Alstom”) is a recognized company in the industry, with whom Otter Tail had worked satisfactorily in the past. Alstom held itself out as being ready, willing, and able to fully support the scheduled outage and complete its work during the outage, as planned. Otter Tail, therefore, contracted with Alstom to perform the generator rewind work.

As it turned out, Alstom fell behind schedule and reported that it was unable to support the planned outage, as originally promised, but could perform the necessary work if the outage were postponed. Accordingly, with no reasonable alternatives available, Otter Tail postponed the start date of the outage from September 6, 2007, to October 24, 2007.

In spite of Alstom’s earlier promises, it came to pass that Alstom was unable or unwilling to complete its work during the delayed outage period. Alstom proposed pushing the outage well into the winter season. That was unacceptable to Otter Tail, for many reasons. Therefore, another contractor, Siemens Power Corporation (“Siemens”), was engaged to perform the rewind work. The outage, as postponed, began on October 24, 2007.

The delay in beginning the necessary work, plus the need for some additional days beyond those planned in order to correct problems identified only after the plant was down, pushed the outage completion into late December. The Big Stone Plant was off-line for a total of 61 days.

The cost of purchased replacement energy was substantially higher than the fuel costs of Big Stone Plant. These higher costs, coupled with colder temperatures in early

December, resulted in significant increases to the fuel clause adjustments that pass energy costs to retail customers.

The balance of this Report provides more detail concerning the chronology of events, background for the work needed, explanation and reasons for management decisions regarding options for the plant outage and for purchasing replacement energy, communications with regulators and customers, and operating statistics for Big Stone Plant after completion of the work.

### **III. Required work**

#### **A. Generator rewind**

The Big Stone Plant is equipped with a Westinghouse generator. A generator stator winding transposition test was performed during a May 2005 turbine-generator outage. The generator stator “failed” the test. The test showed general insulation breakdown between strands. Repair was inadvisable due to the age of the winding and the likelihood there would be additional damage resulting from a repair. A complete rewind was needed.

The May 2005 test was a qualitative test; it could not be used to determine remaining service life. Otter Tail, and its consultants, however, identified serious risks that an extensive unplanned outage could occur, if the generator stator was not rewound. Transposition failures in the stator winding can lead to winding heating, with eventual insulation degradation and failure, to the point where arcing or shorting phase to phase or to ground occurs. There was an additional risk of operating the unit due to potential damage to the generator iron if the winding fails by an arcing fault requiring restacking of

the core iron. In a number of failure scenarios, power generation could be lost for 90 days, or even longer, while repairs and rewinding were completed.<sup>2</sup>

Additional inspections of the generator in 2006 revealed a failed strand in a stator coil, indicating degradation was continuing. Otter Tail and its consultants concluded that a planned outage to rewind the generator was needed.

A generator stator rewind is a major project and requires significant lead-time to plan. The next major outage for Big Stone Plant was scheduled for 2010. However, it was clear that the rewind was needed significantly before that date. In the fall of 2006 the Big Stone Plant owners approved a budget for the rewind. The rewind was scheduled for a planned major plant outage in September and October 2007 that included numerous other important projects, including replacing the AHPC discussed below.

#### **B. AHPC Replacement**

A new Advanced Hybrid Particulate Collector (“AHPC”) was installed in the fall of 2002. The U. S. Department of Energy (“DOE”) gave a grant to the co-owners of Big Stone Plant that provided 49 percent of the funding. The AHPC replaced the existing electrostatic precipitator that had been experiencing on-going mechanical failures. It was DOE’s and Otter Tail’s expectation that this cutting-edge technology would enable the emission-control system to remove 99.99 percent of fine particulates from the flue gas stream at the plant.

The AHPC did not perform as expected. Operational problems began soon after installation. During 2003, 2004 and 2005, extensive work was done to try to improve the performance of the AHPC. This work included using different bags, changing the air

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<sup>2</sup> Risk Report of FM Global dated May 24, 2005. FM Global is the insurance carrier for Big Stone Plant.

pulse pressure and time, adding baffles to change air flow, removing the bags to wash them, washing bags in place, and offline cleaning of the bags. All bags were replaced in the spring of 2006, as well as numerous other bag replacements from 2003 to 2007. Performance continued to degrade, to the point that in June 2006 the AHPC did not allow the plant to operate at full load approximately 90 percent of the time. Derates of up to 80 MW<sup>3</sup> occurred. These derates were caused by high-pressure drop across the bags. Extensive engineering and maintenance work had gone into the AHPC in an effort to fix this problem. In 2006 the decision was made by the Big Stone owners to replace the AHPC with a pulse jet fabric filter system. Work that could be done without taking the plant off line began in 2007, and replacement was completed during the October-December 2007 outage.

#### **IV. Preparation for the planned outage**

Acting as agent for Big Stone Plant, Otter Tail solicited bids for a contractor to perform the generator stator rewind work. Specifications stated that the generator would be available for the on-site stator rewind work beginning on September 8, 2007, based on an anticipated September 6, 2007, outage start date.

Alstom was selected to perform the rewind work. A purchase order binding Alstom to its work proposal was issued December 21, 2006. Between December 2006 and July 2007, Alstom presented schedules and repeatedly promised it would be prepared to furnish all necessary materials and perform the stator rewind work during the planned outage starting on September 6, 2007.

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<sup>3</sup> Derates varied by season and could be as much as 80 MW.

In late July 2007 Alstom informed the Big Stone Plant owners that it was approximately six weeks behind schedule and would not be able to complete the stator rewind work during the planned outage. The plant owners, with no other reasonable options available, agreed to delay the outage by seven weeks, until October 24, 2007, to give Alstom additional time. Alstom stated unequivocally that it would be ready to complete the required work during the postponed outage period. The owners emphasized to Alstom that it was vital that the plant be back on line for the winter season.

In September of 2007 Alstom informed the Big Stone Plant owners that it would not be able to complete its work during the planned outage. Parsons Brinckerhoff AG,<sup>4</sup> an engineering firm hired by Alstom itself, inspected Alstom's plant in Italy where parts were being manufactured and confirmed that Alstom would not be ready to perform the work during the postponed planned outage.

Otter Tail contacted Siemens, a well-known company capable of performing rewind work. Siemens reported that it had the needed parts available, and could perform the necessary rewind work during the postponed planned outage period, but its price would be higher than that of Alstom.

The Big Stone Plant owners had three theoretical options as to how to proceed:

- 1) Postpone the major overhaul work (stator rewind by Alstom and finish replacing the AHPC) until the next spring; maintain a one-week outage in the fall to perform a boiler wash, rebag the AHPC, and perform other required maintenance;

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<sup>4</sup> Parsons Brinckerhoff, founded in 1885 and headquartered in New York City, provides strategic consulting, planning, engineering, and program and construction management services to both public and private sector clients.

- 2) Continue with the fall outage, complete all work except the rewind work, and schedule an outage in the spring for Alstom to complete the stator rewind; or
- 3) Contract with Siemens to do the stator rewind work, maintain the fall outage schedule, and terminate the contract with Alstom.

As will be discussed more fully, only option 3 above was reasonable. Otter Tail and MDU, particularly, needed the generation from the Big Stone Plant for the upcoming winter. None of the Big Stone Plant owners could reasonably take the risk of an unscheduled, extensive outage during the winter caused by a generator failure. The cost of replacement energy during an unplanned, extensive (90 days plus) outage would have been staggering. In addition, replacing the AHPC would eliminate the on-going derates and provide up to 80 MW of additional generation.

Throughout, the cost of replacement energy during the planned outage was an important consideration. The original outage was scheduled for 42 days beginning September 6, a time when market prices were expected to be moderate. The first option listed above would have meant an outage of at least 49 days (7 in the fall and 42 the following spring), assuming no failure occurred during the winter. While market prices may not have been at their highest, seven additional days of replacement energy added significant cost. In addition, the first option would have meant that the plant would continue to experience derates during the winter because the AHPC replacement would not be completed until spring.

The second option listed would have meant a minimum of 73 days (31 in the fall and at least 42 the following spring) for two outages. Since the rewind was to be the

critical path for the spring outage, that outage had a possibility of taking more than 42 days, which, if that happened, could have put the outage into a time of higher energy prices. Replacement energy costs were a major deterrent to this option.

The third option was projected to involve the same number of days of outage as the original plan, but Siemens' price for the stator rewind was higher.

Another consideration was the impact on the contractors other than Alstom that were needed to perform the various other maintenance projects that could only be done during a lengthy scheduled plant outage. These contractors were available for the fall 2007 planned outage, even after the delay. To postpone their work until spring of 2008 added the uncertainty that these other needed contractors would not be available. There was also a great potential, perhaps even a certainty, that their prices would go up, and the cost of their work could not be completed within the original budget.

An additional consideration related to the timing of the AHPC replacement. Otter Tail requested and received 12 months of extended accreditation from MAPP for the 50 MW of derates (on average) that the plant experienced due to the AHPC problems. Had the decision been made to defer the outage until the spring, there was no guarantee that another 6-month extension would have been granted. MAPP requires due diligence by the generating unit under extended accreditation to complete the work that needs to be done to return the unit to full service. In the end, it would have been up to the Accreditation Committee to determine whether the Big Stone Plant owners were affording due diligence in returning the unit to service. Not completing the work in the fall would have placed the plant at risk of losing accreditation on the 50 MW of derates that had been under extended accreditation. Had a hypothetical spring outage been

delayed into the summer months and the extended accreditation been denied, replacing that 50 MW of capacity AND energy with purchases would have been extremely costly.

Although the Big Stone Plant owners considered all options carefully, in the final analysis, the decision was clear. The risk of an unplanned generator failure in the winter, in combination with other factors involved, such as the continued derates caused by the AHPC, made it clear that option 3 was the proper option to exercise. On October 11, 2007, the Big Stone Plant owners Coordination Committee<sup>5</sup> voted to move forward with the third option. The outage was planned to begin on October 24, 2007, and, hopefully, end December 5, 2007.

## **V. Outage is extended**

Big Stone Plant was taken off line on October 24, 2007. It initially was planned to be back on line on December 5, 2007. The plant actually came back on line on December 24, 2007, 19 days later than originally planned.

When a generating plant is down and the generator opened, additional tests can be performed and visual inspections made. Additional repairs were identified once the plant was down. Waiting for materials and the repairs themselves extended the outage. The primary contributors to this extended outage are listed below.

- Delay #1: Generator to exciter coupling bolting seized (couldn't loosen). Had to machine the bolting to remove. Added 2.5 days to outage.
- Delay #2: Siemens found unexpected conditions in the generator due to 1996 modifications to end-winding supports. Added 30 hours to outage.

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<sup>5</sup> The Big Stone Plant Coordination Committee members are the CEO's from the respective owner companies.

- Delay #3: The Siemens contract specifically stated lead paint abatement would result in additional outage time. The interior of the generator was originally primed and painted with lead-based paint, and certain areas were abated to allow for internal structural changes to accommodate the new rewind design. Added approximately 24 hours to the outage.
- Delay #4: Generator stator failed electrical testing requiring restacking of the end shields (insulation breakdown that needed to be replaced). Materials took 7 days to be delivered. Added 9 days to outage.
- Delay #5: Generator to turbine alignment required. Had to move entire generator side-to-side for proper alignment. Added 2 days to outage.
- Delay #6: Generator ventilation test required for Siemens to guarantee winding temperature rise. This was not known until after outage dates were set. Added 1 day to outage.

Discovery of the condition described in Delay #4 above confirmed the desirability of having the outage in the fall. The risks of waiting until spring were even greater than the plant owners assumed when they decided to go forward with the outage in the fall.

## **VI. Replacement energy**

It is Otter Tail's practice to use forward purchases to cover the major portion of replacement energy for planned plant outages and for energy needs for peak usage times. Purchasing power on a forward basis for longer-term outages when required and over the peak winter months generally keeps costs lower. Exposure to daily markets and their associated volatility over longer periods of time can potentially lead to extreme energy prices that are undesirable. Pre-planned purchases reduce that risk. Use of demand side management is an additional tool that is used to help manage cost.

In the case where a deficit associated with a planned outage is known well in advance, wholesale energy is purchased anytime the price falls below \$30, which is extremely rare. All other major purchases (50 MW or greater and the duration of the

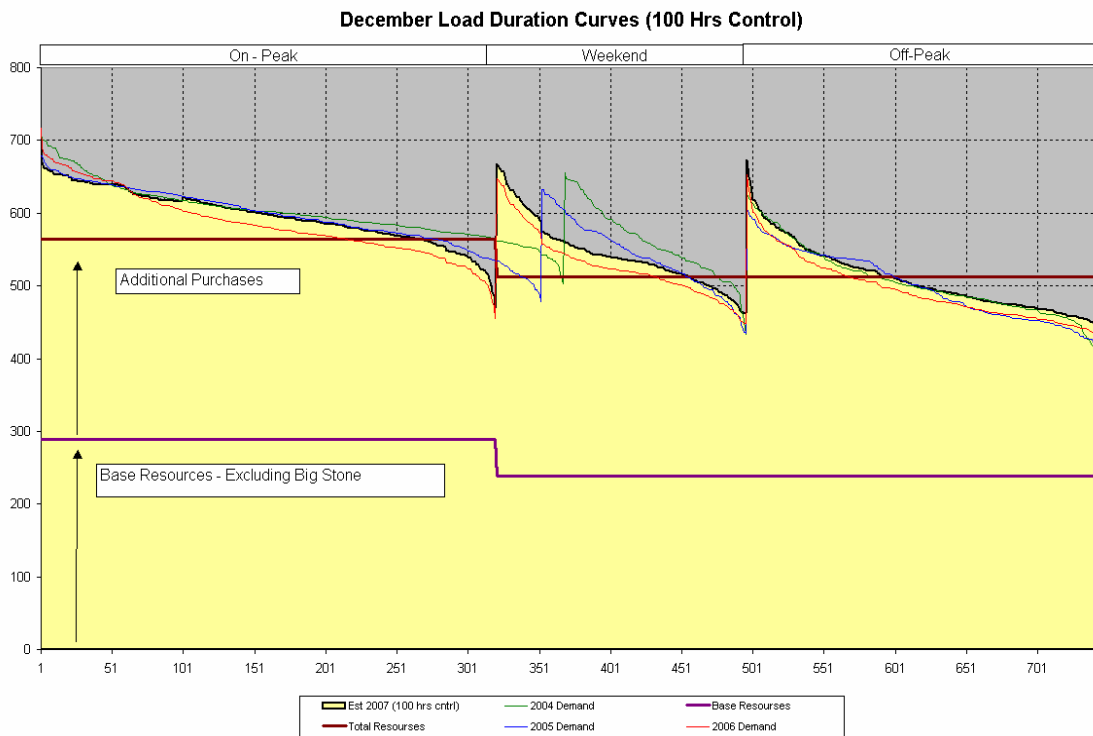
deficit is more than 14 days, or the recommended purchase is greater than \$1 million) trigger the following internal process.

- The amount of deficit is determined using the projected load forecast and available resources. An estimate of purchased energy costs, including other options that may be available, such as peaking units, is modeled to determine the impacts to the cost of energy. In addition and when warranted, a forecast including an estimate of load control hours with and without the purchase is modeled. This is an estimate since the magnitude of available load control changes dramatically with seasonal and even daily weather patterns.
- In all cases (except a planned or unplanned outage of less than 14 days), the process occurs within two months of the actual deficit. (For example, for a deficit in December, January, and February, the process is triggered by October 1).
- Final authorizations for purchases occur at the executive level.

With regard to replacement energy for the Big Stone Plant outage, Otter Tail purchased 200 MW of energy around the clock for the month of November. These November energy purchases were made in mid-August and in mid-October. Big Stone Plant was down for the last days of October. Energy from the MISO Day Ahead market was used to cover those energy needs. Similarly, the plant was expected to be down only a few days in the first part of December and we likely would have used the Day Ahead market to secure the needed energy.

When it was known that additional repairs were required and Big Stone Plant would not be back on line for as much as three weeks in December, another forward energy purchase was made to cover the December period. When determining how much

replacement energy is needed, Otter Tail matches load duration curves with available generation and purchases blocks of energy to cover a significant portion of its load. Common types of block purchases are on-peak 5x16, weekend 2x16, and off-peak 7x8. Below is the load duration curve used to determine how much additional energy would be needed when it was known that Big Stone Plant would be off line longer than expected.



Purchases were made to the level shown, and peak times were covered either from the MISO energy market or Otter Tail's own peaking generators, whichever was lower cost.

Using the original outage schedule for Big Stone Plant from September 6 through October 16, 2007, Otter Tail's forecast included purchasing 133,000 MWH of replacement energy at an average projected cost of \$66.56. In fact, Otter Tail purchased

305,365 MWH of replacement energy at an average cost of \$50.40. A little over 72 percent of the amount purchased was made through forward contracts to lock in the price paid. Timing and cost of these purchases had a significant impact on Otter Tail's cost of energy and consequently its fuel clause adjustments in all three states. When the outage extended into December, Otter Tail needed to purchase 133,400 MWH of replacement energy for that month, at an average price of just over \$70.

In order to meet its customers' winter energy needs, Otter Tail routinely purchases blocks of additional energy each winter for the months of December, January, and February. For the winter of 2007-2008, Otter Tail made an advance purchase of 50 MW for each of the months of December, January, and February. The normal purchase for December plus the replacement energy needed when Big Stone Plant was not available pushed Otter Tail's cost of energy for December to 5.2 cents.

## **VII. Cost of energy and fuel clause adjustments**

Otter Tail projected the impact of the scheduled outage of Big Stone Plant on the cost of energy and the fuel clause adjustments (FCA) in each state. When the start of the outage was delayed, Otter Tail updated its FCA projections. It was clear that the normal winter energy purchases plus the purchase of replacement energy for the Big Stone Plant outage would cause Otter Tail's FCA to be unusually high beginning in January 2008. Otter Tail's projections are included with this Report as Attachments 1 through 3.

Each state's calculation of its FCA is slightly different and Otter Tail's base cost of energy set at the time of its last rate case is different in each state. Minnesota uses a two-month average with an annual true-up. North Dakota uses a four-month average and

South Dakota uses a three-month average. Both of the Dakotas use a monthly true-up. North Dakota's higher FCA lasted the longest because of its four-month average. It also saw the greatest increase over December because December included a refund of MISO Schedule 16 and 17 costs pursuant to a settlement in that state. The refund caused the December FCA to be lower than it would have been without the refund.

### **VIII. Wholesale margins**

Loss of a baseload plant significantly reduces asset-based margins. To the extent energy produced by Otter Tail's own generating plants is not needed to serve its retail customers, that energy is sold in the MISO energy market to produce asset-based revenue. The following table lists the asset-based wholesale margins for the last five months of 2007 from all of Otter Tail's generators. While some sales were made, the number of hours was greatly reduced with Big Stone Plant being off line.

2007	Asset-based wholesale margins
August	\$1,466,916
September	\$1,563,803
October	\$1,647,550
November	\$823,386
December	\$341,587

### **IX. Communications with regulators**

Representatives of Otter Tail met with the North Dakota commissioners and staff at a periodic information exchange meeting in Bismarck on November 5, 2007, and with Minnesota Department of Commerce in St. Paul on November 27, 2007. The regulators

were alerted to these cost increases and the reasons for them. Otter Tail provided additional information in its monthly FCA filings.

#### **X. Communications with customers**

Members of Otter Tail's Industrial Services department provide, upon request, forecasts of FCA rates. These forecasts were updated to show the increasing costs and Otter Tail representatives discussed them with its largest customers.<sup>6</sup> In addition, Otter Tail sent a letter<sup>7</sup> dated December 14, 2007, to all of its customers in all three states informing them that costs were expected to increase in the winter months and encouraging conservation and efficient energy use.

#### **XI. Status as of May 2008**

Otter Tail's higher energy rates during the 2007-2008 winter were of great concern for Otter Tail and its customers. The North Dakota Commission, in particular, received an unusually large number of calls from our customers. In an effort to reduce the amount of energy it needed to purchase in December, Otter Tail also imposed more than usual control hours on customers on interruptible rate schedules.

Since coming back on line in late December, Big Stone Plant has been operating closer to its full potential. To see what this means in terms of cost, we can make the following comparison. Using the time period November 1, 2007, to June 7, 2008, Otter Tail compared the actual output of Big Stone Plant (May and June are estimated), with estimated output if the outage to replace the AHPC had been delayed until spring. The

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<sup>6</sup> The projections included with the Report as Attachments 1 through 3 are available to customers.

<sup>7</sup> A sample of the letter for each state is included with this Report as Attachments 4 through 6..

plant produced 1,580,570 MWH with the fall outage and was expected to produce 1,548,100 MWH with a spring outage. The increased output of 32,470 MWH multiplied by the difference between the average purchased energy cost and the cost of fuel at Big Stone indicates a savings of \$1,234,000. For the months of January, February, March, and April, 2008, Big Stone Plant produced over 1,250,000 MWH. This amount is approximately 125,000 MWH or 10 percent more energy than the plant was expected to be able to produce if the AHPC had not been replaced until May 2008. In addition, the plant is now able to reach its URGE rating of 475 MW, whereas, without the AHPC replacement, the plant was expected to achieve only 85 to 90 percent of its potential.

This increased generation has allowed Otter Tail to reduce its hours of control for customers. The amount of purchased energy is back to more normal levels. The FCA for May in Minnesota is 0.101<sup>8</sup> cents/kWh, in North Dakota is 2.27 cents/kWh and in South Dakota is 1.4 cents/kWh. North Dakota has some lingering effects because of its four-month averaging and the tendency of the FCA mechanism to over-compensate for cost changes. The FCA for North Dakota is projected to be about a penny in June and a more usual 0.6 cent per kWh beginning July.

## **XII. Conclusion**

The outage, scheduled primarily for rewinding the generator, but also for finishing replacement of the AHPC and other work, had been planned well in advance of the scheduled time for the plant to go off-line. When circumstances over which Otter Tail had no control caused the beginning date for the outage to slip from September 6 to

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<sup>8</sup> Minnesota's FCA is noticeably smaller than the Dakotas because Otter Tail reset its base cost of energy in November 2007, to coincide with its general rate case.

October 24, 2007, the Big Stone Plant owners needed to choose from among several undesirable options. Even with the benefit of hindsight, knowing that the extension of the outage, coupled with cold weather and high market prices, had undesirable results for Otter Tail and its customers, Otter Tail believes the decision clearly was the correct one. The risk of failure of the generator if the rewind had not been done in the fall outage, particularly, was unacceptable. If a failure had occurred, the price impact would have gone far beyond the levels that are the cause of current questions.

**Actual and Forecasted Fuel Clause Adjustment (FCA) Rates For Minnesota  
2007- 2008**

	MN
October-2007	\$0.006
November-2007	\$0.011
December-2007	(\$0.001)
January-2008	\$0.013
February-2008	\$0.014
March-2008	\$0.005
April-2008	\$0.003
May-2008	\$0.000
June-2008	(\$0.003)
July-2008	(\$0.004)
August-2008	(\$0.002)
September-2008	(\$0.005)
October-2008	(\$0.007)
November-2008	(\$0.007)
December-2008	(\$0.006)
Average	<u>\$0.001</u>



Forecast done in October 2007

Based on Actual

**Disclaimer Statement**

This document includes forward-looking as well as historical information. These statements are based on Otter Tail Power Company's historical costs and kWh's as well as current future expectations, which are subject to uncertainty and changes in circumstances. Actual results may differ materially from these expectations due to a number of factors including, but not limited to, market valuations of forward energy contracts, weather conditions, fuel and purchased power costs, transportation costs, plant availability and any other factors outside of Otter Tail Power Company's control. Otter Tail Power Company makes no representation and accepts no liability for the content or for the consequences of any actions taken on the basis of this information provided.

**Actual and Forecasted Fuel Clause Adjustment (FCA) Rates For North Dakota  
2007- 2008**

	ND
October-2007	\$0.003
November-2007	\$0.010
December-2007	\$0.006
January-2008	\$0.020
February-2008	\$0.026
March-2008	\$0.025
April-2008	\$0.024
May-2008	\$0.015
June-2008	\$0.010
July-2008	\$0.007
August-2008	\$0.006
September-2008	\$0.005
October-2008	\$0.005
November-2008	\$0.006
December-2008	\$0.006
Average	<u>\$0.011</u>



Forecast done in October 2007

Based on Actual

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**Actual and Forecasted Fuel Clause Adjustment (FCA) Rates For South Dakota  
2007- 2008**

	SD
October-2007	\$0.005
November-2007	\$0.009
December-2007	\$0.008
January-2008	\$0.017
February-2008	\$0.019
March-2008	\$0.019
April-2008	\$0.014
May-2008	\$0.012
June-2008	\$0.012
July-2008	\$0.009
August-2008	\$0.010
September-2008	\$0.009
October-2008	\$0.007
November-2008	\$0.007
December-2008	\$0.007
Average	\$0.011

Forecast done in October 2007

Based on Actual

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 PO Box 496  
 Fergus Falls, Minnesota 56538-0496  
 218 739-8200  
 www.otpco.com (web site)

December 14, 2007



Dear Minnesota Customer:

I'm writing to inform you about a period of higher energy prices this winter and to provide some tips on how you can lower your electrical use to reduce the impact of the higher prices on your bill.

This increase is the result of energy purchases for this winter, coupled with the cost to purchase replacement energy for a planned generating plant maintenance outage that began in late October and is scheduled to end in mid-December.

The time lag between our increased costs and the increase in the Resource Adjustment on your bill means that the Resource Adjustment will be higher than usual beginning in January. A two-month average is used to calculate the Resource Adjustment in Minnesota. That means the increase will be applied to the amount of energy you use now through the end of February, which will be reflected in your March bill. Increases in purchased-power costs are passed on to customers without any markup.

**Conserving electricity is the best way to manage your energy costs.** Follow these tips to help minimize the impact on your energy bill this winter:

- Turn off the lights in rooms that you're not using.
- Set your thermostat as low as is comfortable.
- Keep the draperies and blinds on your south-facing windows open during the day to allow sunlight and heat to enter your home. Close them at night to help reduce heat loss.
- Make sure registers, baseboard heaters, and radiators aren't blocked by furniture or drapes.
- Close off unoccupied rooms.
- Lower your water heater thermostat to 120°F.
- Wash laundry with cold water whenever possible and wash and dry full loads.
- Clean the lint filter in your dryer after each drying cycle to maintain efficiency.
- Set your refrigerator at 40° F. and freezer at 0° F.
- Keep your oven door closed while baking. Temperatures can drop as much as 50° every time the oven door is opened, causing the oven to reheat.

To learn more about how you can save call **Customer Service** at **800-257-4044** and request a free copy of our **44 no-cost and low-cost energy-saving tips** booklet. You'll also find many energy-saving tips on our web site **www.ConservingElectricity.com**.

We thought you might want to know that we anticipate higher energy prices this winter so you can plan your budget and understand what's happening to your bill and why. If you have additional questions please contact Customer Service.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Helland".

Mark Helland  
 Vice President, Customer Service

215 South Cascade Street  
 PO Box 496  
 Fergus Falls, Minnesota 56538-0496  
 218 739-8200  
 www.otpc.com (web site)



December 14, 2007

Dear North Dakota Customer:

I'm writing to inform you about a period of higher energy prices this winter and to provide some tips on how you can lower your electrical use to reduce the impact of the higher prices on your bill.

This increase is the result of energy purchases for this winter, coupled with the cost to purchase replacement energy for a planned generating plant maintenance outage that began in late October and is scheduled to end in mid-December.

The time lag between our increased costs and the increase in the Energy Adjustment on your bill means that the Energy Adjustment will be higher than usual beginning in January. A four-month average is used to calculate the Energy Adjustment in North Dakota. That means the increase will be applied to the amount of energy you use now through the end of April, which will be reflected in your May bill. Increases in purchased-power costs are passed on to customers without any markup.

**Conserving electricity is the best way to manage your energy costs.** Follow these tips to help minimize the impact on your energy bill this winter:

- Turn off the lights in rooms that you're not using.
- Set your thermostat as low as is comfortable.
- Keep the draperies and blinds on your south-facing windows open during the day to allow sunlight and heat to enter your home. Close them at night to help reduce heat loss.
- Make sure registers, baseboard heaters, and radiators aren't blocked by furniture or drapes.
- Close off unoccupied rooms.
- Lower your water heater thermostat to 120°F.
- Wash laundry with cold water whenever possible and wash and dry full loads.
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We thought you might want to know that we anticipate higher energy prices this winter so you can plan your budget and understand what's happening to your bill and why. If you have additional questions please contact Customer Service.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Helland".

Mark Helland  
 Vice President, Customer Service

215 South Cascade Street  
 PO Box 496  
 Fergus Falls, Minnesota 56538-0496  
 218 739-8200  
 www.otpc.com (web site)

December 14, 2007



Dear South Dakota Customer:

I'm writing to inform you about a period of higher energy prices this winter and to provide some tips on how you can lower your electrical use to reduce the impact of the higher prices on your bill.

This increase is the result of energy purchases for this winter, coupled with the cost to purchase replacement energy for a planned generating plant maintenance outage that began in late October and is scheduled to end in mid-December.

The time lag between our increased costs and the increase in the Energy Adjustment on your bill means that the Energy Adjustment will be higher than usual beginning in January. A three-month average is used to calculate the Energy Adjustment in South Dakota. That means the increase will be applied to the amount of energy you use now through the end of March, which will be reflected in your April bill. Increases in purchased-power costs are passed on to customers without any markup.

**Conserving electricity is the best way to manage your energy costs.** Follow these tips to help minimize the impact on your energy bill this winter:

- Turn off the lights in rooms that you're not using.
- Set your thermostat as low as is comfortable.
- Keep the draperies and blinds on your south-facing windows open during the day to allow sunlight and heat to enter your home. Close them at night to help reduce heat loss.
- Make sure registers, baseboard heaters, and radiators aren't blocked by furniture or drapes.
- Close off unoccupied rooms.
- Lower your water heater thermostat to 120°F.
- Wash laundry with cold water whenever possible and wash and dry full loads.
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- Set your refrigerator at 40° F. and freezer at 0° F.
- Keep your oven door closed while baking. Temperatures can drop as much as 50° every time the oven door is opened, causing the oven to reheat.

To learn more about how you can save call **Customer Service** at **800-257-4044** and request a free copy of our **44 no-cost and low-cost energy-saving tips** booklet. You'll also find many energy-saving tips on our web site **www.ConservingElectricity.com**.

We thought you might want to know that we anticipate higher energy prices this winter so you can plan your budget and understand what's happening to your bill and why. If you have additional questions please contact Customer Service.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Helland", is written over a horizontal line.

Mark Helland  
 Vice President, Customer Service