

Exhibit No.:  
Issue: Rate Design  
Witness: Layle (Kip) Smith  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Noranda Aluminum, Inc.  
Case No.: EC-2014-\_\_\_\_\_  
Date Testimony Prepared: February 10, 2014

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Missouri Public  
Service Commission

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

\_\_\_\_\_  
In the Matter of Noranda )  
Aluminum, Inc.'s Request for )  
Revisions to Union Electric )  
Company d/b/a Ameren ) Case No. EC-2014-\_\_\_\_\_  
Missouri's Large Transmission )  
Service Tariff to Decrease its )  
Rate for Electric Service )  
\_\_\_\_\_ )

Direct Testimony of

**Kip Smith  
(NP VERSION)**

On behalf of

**Noranda Aluminum, Inc.**

February 10, 2014

*Noranda* Exhibit No. 2  
Date 6-16-14 Reporter KF  
File No. EC-2014-0824



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	)	

**Direct Testimony of Kip Smith**

1    **Q    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A    Kip Smith. My business address is Suite 600, 801 Crescent Centre Drive,  
3       Franklin, Tennessee 37067.

4  
5    **Q    WHAT IS YOUR OCCUPATION?**

6    A    I am the President and CEO of Noranda Aluminum, Inc. ("Noranda"). I am  
7       familiar with, and am responsible for, all aspects of Noranda's business.

8  
9    **Q    PLEASE DESCRIBE THE BUSINESS OF NORANDA.**

10   A    Noranda is an integrated aluminum manufacturer. Aluminum is a  
11       commodity business. Its manufacturing is energy-intensive and capital-  
12       intensive. Noranda is a U.S. based, publically traded (NYSE) company  
13       focused on U.S. markets.

14                In addition to its smelter near New Madrid, Missouri, Noranda owns  
15       and operates a bauxite mine in Jamaica and an alumina refinery in

1 Gramercy, Louisiana, and rolling mills in Arkansas, North Carolina and  
2 Tennessee. The New Madrid Smelter produces molten aluminum and  
3 converts molten aluminum to aluminum products such as billet, rod,  
4 foundry products and primary ingots. The smelter has been operating in  
5 Southeast Missouri since February 25, 1971. Its primary product inputs  
6 are electricity and alumina. The alumina is delivered via barge over the  
7 Mississippi River. Alumina, also known as aluminum oxide, is produced  
8 from bauxite ore. The New Madrid Smelter processes the alumina  
9 through three production lines that electrolytically convert aluminum oxide  
10 into molten aluminum. The process requires an unusually large amount of  
11 electricity. On an annual basis, the New Madrid Smelter purchases about  
12 the same amount of electricity as the entire city of Springfield, MO.  
13 Electricity must be constantly available to the production lines at the New  
14 Madrid Smelter, otherwise the lines will be damaged from liquid metal  
15 solidifying in the lines. When at full production, the New Madrid Smelter  
16 produces more than 260,000 metric tons of aluminum per year. The  
17 aluminum is sold primarily in North America. Noranda is one of the largest  
18 foil producers in North America and a major producer of light gauge sheet  
19 products.

20

21 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
22 **PROCEEDING?**

1 A The purpose of my testimony is to explain why our request for a rate  
2 reduction is critical for the New Madrid Smelter to continue to operate and  
3 sustain its business in Missouri. I will also explain why Commission  
4 approval of our request is in the public interest. The decision in this case  
5 is vitally important to the New Madrid Smelter's near-term and long-term  
6 operations. The New Madrid Smelter's sustainability in Southeast  
7 Missouri is inextricably linked to the employment and well-being of the  
8 approximately 888 Noranda employees and their families as well as  
9 dozens of other businesses in Southeast Missouri and the employees and  
10 families that they support.

11

12 **Q WHAT IS NORANDA'S RATE REQUEST IN THIS CASE?**

13 A Noranda requests a rate of \$30/MWh for the New Madrid Smelter for a  
14 fixed term of ten years, subject to a rate increase of up to two percent at  
15 the time of each general rate increase granted to Ameren Missouri by the  
16 Commission during this period. Noranda is also requesting expedited  
17 Commission approval for this rate change.

18

19 **Q WHY IS A RATE REDUCTION FOR NORANDA IN THE PUBLIC**  
20 **INTEREST?**

21 A The New Madrid Smelter has been an integral part of the economic  
22 landscape of Southeast Missouri for more than 40 years. The New Madrid  
23 Smelter is the largest direct and indirect manufacturing employer in

1 Southeast Missouri. Hundreds of Southeast Missouri families would be  
2 placed in financial peril if the New Madrid Smelter was forced to shut its  
3 doors. Millions of dollars flow into the homes and businesses of  
4 Southeast Missourians as a result of the revenues from Noranda products,  
5 which are sold mostly outside of the state. The New Madrid Smelter's  
6 economic benefit to the state of Missouri is estimated to be in excess of  
7 \$300 million annually.

8 Moreover, the New Madrid Smelter provides hundreds of skilled  
9 jobs that pay good, stable wages and provides its employees medical and  
10 retirement benefits. The New Madrid Smelter's 2013 estimated annual  
11 payroll was \$95 million. In addition, the New Madrid Smelter pays 17.9%  
12 of the total taxes collected in New Madrid County and 28.7% of the taxes  
13 paid for the New Madrid County R-1 Schools. Taxes paid by the New  
14 Madrid Smelter help keep the school systems viable and help to maintain  
15 the infrastructure and needed government institutions in Southeast  
16 Missouri. It is vital to our employees, to their families, to the community, to  
17 the merchants that our employees frequent, to our vendors (including  
18 Ameren Missouri), and to their families, that the New Madrid Smelter  
19 remain viable. Noranda's proposed rate would allow the smelter to stay in  
20 business for the near term, ensure the continuing viability of the smelter  
21 and sustain its numerous benefits to the community and the state of  
22 Missouri.

1           Finally, the rate proposed by Noranda will provide ongoing benefits  
2 for all of Ameren's retail customers as Noranda will continue to be  
3 Ameren's largest electric customer with a very high load factor. As  
4 explained by Maurice Brubaker, Noranda's proposed rate is greater than  
5 the incremental cost to serve the Noranda load, thus creating a direct  
6 benefit to other customers. This direct benefit would be lost if Noranda  
7 ceased taking power from Ameren.

8

9   **Q   WHY DOES THE NEW MADRID SMELTER NEED EXPEDITED**  
10 **APPROVAL OF ITS REQUEST FOR A RATE REDUCTION?**

11   **A**   Market conditions are creating short-term liquidity challenges throughout  
12 the aluminum industry. Unfortunately, if the New Madrid Smelter is not  
13 granted the rate relief requested and in an expedited manner, based on  
14 current market conditions, I expect that the New Madrid Smelter will be  
15 required to reduce its workforce by 150-200 employees before the end of  
16 2014. Although this work force reduction will not provide savings equal to  
17 Noranda's proposed electrical rate reduction, it would allow the smelter to  
18 survive for a period of time, and it is the maximum headcount reduction we  
19 believe that we could attempt without affecting our ability to meet our  
20 commitments to the New Madrid Smelter's external customers.

21           Noranda has and continues to make efforts to reduce other costs  
22 and remain as efficient as possible. Noranda's culture of annual  
23 productivity improvements has positioned us well to accelerate cost

1 reductions (except for electricity). Noranda will do its part; we expect to  
2 improve our Noranda-wide operational efficiency (excluding electricity) by  
3 \$177 million over the next three years.

4 But if Noranda is forced to reduce the work force at the New Madrid  
5 Smelter by 150-200 employees, even when coupled with Noranda's other  
6 cost savings measures, this will not be sufficient as a long-term  
7 sustainable strategy. Without the requested rate reduction, even with our  
8 planned reductions in other costs, the New Madrid Smelter would have  
9 insufficient liquidity and be subject to closure \*\* \_\_\_\_\_ \*\*, resulting in the  
10 loss of all jobs at the smelter. Thus, I believe the rate relief requested is  
11 necessary to preserve jobs at the New Madrid Smelter not only in the  
12 short-term, but in the long-term as well. A closure of the New Madrid  
13 Smelter would be a tragedy for the 888 families who are supported by the  
14 stable and dependable employment offered by Noranda, and also a  
15 tragedy for the families whose livelihoods depend on the businesses  
16 supported by Noranda.

17 In contrast, if Noranda's rate request is granted, the New Madrid  
18 Smelter will preserve 150-200 jobs in the near term and continue to  
19 operate effectively over the proposed contract term. Granting Noranda's  
20 rate request will enable the New Madrid Smelter to weather the current  
21 crisis, retain these 150-200 jobs, and continue to upgrade and invest for  
22 long-term growth, which is expected to preserve all of the jobs associated  
23 with the smelter in the long-run.



1 Q PLEASE DEFINE WHAT YOU MEAN WHEN YOU USE THE TERM  
2 LIQUIDITY AND EXPLAIN ITS IMPORTANCE TO NORANDA.

3 A Liquidity is defined as cash on hand plus available borrowings. Every  
4 company, including Noranda, needs cash in order to run its business.  
5

6 Q WHAT LEVEL OF LIQUIDITY IS NECESSARY FOR NORANDA TO  
7 REMAIN A COMPETITIVE SMELTER IN THE U.S.?

8 A \*\* \_\_\_\_\_  
9 \_\_\_\_\_  
10 \_\_\_\_\_  
11 \_\_\_\_\_ \*\*

12  
13 Q WHY DOES NORANDA NEED A LONG-TERM CONTRACT?

14 A As discussed in Henry Fayne's testimony, it is a well established  
15 competitive practice within the US aluminum industry for power contracts  
16 to be long-term in nature. Power contracts in the US range from a few  
17 years to thirty years. Currently five of the remaining eight smelters that  
18 purchase their power have power contracts of ten years or longer.

19 Noranda needs a contract term of ten years to be competitive and  
20 to provide the raw material stability to run its business sustainably.  
21

22 Q WHY ARE ELECTRIC RATES SO IMPORTANT TO THE NEW MADRID  
23 SMELTER?

1 A The viability of an aluminum smelter is largely dictated by its cost to  
2 produce aluminum. Electricity is our leading single cost, representing  
3 approximately one-third of the New Madrid Smelter's cost to produce. If a  
4 smelter's cost of electricity is uncompetitive, that is, if its cost of electricity  
5 is significantly higher than the cost to other smelters, the viability of the  
6 smelter is jeopardized. It is not possible to offset an uncompetitive cost of  
7 electricity with cost reductions and productivity improvements. The cost of  
8 electricity can make or break Noranda's ability to survive in the short-term  
9 and maintain the viability of the smelter in the long-term.

10 The aluminum production industry is a globally competitive  
11 commodity industry. The aluminum produced by the New Madrid Smelter  
12 is essentially identical to that produced by other aluminum smelters. The  
13 price for aluminum is established on the London Metal Exchange (LME),  
14 and a producer such as Noranda has little or no influence on the LME  
15 price. Because the product is largely undifferentiated and its price is  
16 outside of Noranda's control, Noranda must compete on the basis of  
17 production cost. Because electricity constitutes such a large percentage  
18 of production cost, affordable electricity is essential to the New Madrid  
19 Smelter's survival and prosperity.

20  
21 Q IS NORANDA'S POWER RATE COMPETITIVE WITHIN THE U.S.  
22 ALUMINUM INDUSTRY?

1 A No. The competitive landscape for electricity provided to aluminum  
2 smelters in the U.S. has, and is, changing dramatically. As discussed in  
3 the testimony of Noranda witness Henry Fayne, in 2014, we expect  
4 Noranda's power rate to be second highest among the eight remaining US  
5 smelters that buy their power. Specifically, the cost to Noranda, assuming  
6 no change in Ameren rates, is expected to be approximately \$5/MWh  
7 higher than the average rate for smelters located in the United States in  
8 2014. That means the New Madrid Smelter is paying \$20 million each  
9 and every year more than the average domestic smelter. Compared to  
10 the global average, excluding the U.S. and China, Noranda would be  
11 paying more than \$11/MWh higher, or \$49 million per year. Compared to  
12 the three domestic smelters with the lowest cost of electricity, the New  
13 Madrid Smelter would be paying a staggering \$17.5/MWh, or \$73 million,  
14 more per year. We have worked hard to reduce costs, but it's virtually  
15 impossible to offset such differences.

16

17 **Q EARLIER YOU DESCRIBED NORANDA AS AN ENERGY-INTENSIVE**  
18 **BUSINESS. WHAT DOES THAT MEAN?**

19 A The New Madrid Smelter uses approximately 480 MW of power, 24 hours  
20 per day, 7 days per week, 52 weeks per year, with a 98% load factor. The  
21 New Madrid Smelter is Ameren Missouri's largest customer, and is the  
22 largest consumer of electricity in Missouri. As a result of the particular  
23 physical supply arrangements, none of the Ameren Missouri distribution

1 facilities are used in providing service to the New Madrid Smelter, leading  
2 to lower losses and lower assignment of costs. All of these considerations  
3 lead to a lower unit cost for the service provided to the New Madrid  
4 Smelter as compared to other customers.

5 As I noted above, electricity is the single largest operational cost of  
6 the New Madrid Smelter, representing about one-third of its overall cost of  
7 producing primary aluminum. When the New Madrid Smelter is at full  
8 production, at current electric rates, it pays Ameren Missouri  
9 approximately \$160 million in base rates for electricity each year plus  
10 charges under the fuel adjustment clause.<sup>1</sup> Since 2008, as a result of rate  
11 increases and changes in the fuel adjustment clause, Noranda's annual  
12 cost of electricity has increased by about 32 percent, or an increase of  
13 about \$44 million.

14  
15 **Q YOU ALSO DESCRIBED NORANDA AS A CAPITAL-INTENSIVE**  
16 **BUSINESS. PLEASE EXPLAIN NORANDA'S CAPITAL INVESTMENT**  
17 **REQUIREMENTS.**

18 **A** Noranda requires significant capital investment annually to support daily  
19 operations of its plants. This is referred to as "Sustaining Capital."  
20 Noranda also requires significant capital to grow to support Noranda's  
21 customers and maintain Noranda's competitive position which we refer to  
22 as "Growth Capital." Noranda, on a companywide basis, expects to spend

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<sup>1</sup>In addition, we directly pay Associated Electric Cooperative, Inc. approximately \$6.6 million per year, or about \$1.50 per MWh, for the use of its transmission system to deliver power to us.

1 on average approximately \$65-75 million annually for Sustaining Capital  
2 and \$20-25 million annually for Growth Capital. The majority of our capital  
3 spending has been at New Madrid and that trend is expected to continue.  
4 We expect to spend \$28 million in Sustaining Capital and \$38 million in  
5 Growth Capital at New Madrid in 2014.

6

7 **Q HAVE YOU PREPARED AN EXHIBIT WHICH SUPPORTS THE NEED**  
8 **FOR NORANDA'S REQUESTED RATE REDUCTION?**

9 A Yes. Financial data supporting Noranda's request is included in my  
10 testimony as Exhibit A, which is a highly confidential document.

11

12 **Q PLEASE DESCRIBE THE EXHIBIT.**

13 A This exhibit shows Noranda's liquidity position each year, as well as cash  
14 flows, under three different scenarios. The first scenario, called the "No  
15 Liquidity Actions," contemplates Noranda taking no action to increase  
16 liquidity. The second scenario, called "With Liquidity Actions, But No  
17 Power Rate Reduction," contemplates all reasonable and sustainable  
18 liquidity actions that Noranda expects to take, but includes no electric rate  
19 relief. The third scenario, called "With Liquidity Actions and \$30 Power  
20 Rate," contemplates the liquidity actions under the second scenario, plus  
21 includes the electric rate relief requested herein.

22

1 Q PLEASE EXPLAIN THE CONCLUSIONS THAT THE EXHIBIT  
2 SUPPORTS.

3 A There are five conclusions from this exhibit.

4 1. Noranda is facing short-term liquidity and long-term reinvestment  
5 challenges.

6 2. Without the short-term actions Noranda has taken and plans to take  
7 ("No Liquidity Actions") to accelerate its productivity and improve its  
8 liquidity position, current market conditions would cause Noranda to  
9 consume all of its available liquidity by the end of 2015.

10 3. Noranda will accelerate its productivity programs ("With Liquidity  
11 Actions, but No Power Rate Reduction") but that will not be enough to  
12 sustainably navigate through current market conditions and  
13 sustainably run the business. Productivity improvements and cost  
14 reductions expected to improve pre-tax cash flow by over \$220  
15 million over the five-year forecast period would not be sufficient to  
16 overcome the impact of uncompetitive power.

17 4. Noranda must have competitive power to survive these short-term  
18 market conditions and to sustainably reinvest in the business.

19 5. Noranda has a sustainable future with this requested rate ("With  
20 Liquidity Actions and \$30 Power Rate").

21 (Note: Exhibit A shows Noranda's liquidity position under various  
22 scenarios. In all cases, we have assumed LME aluminum prices based  
23 on a recent forward curve; on that basis, the LME price is expected to  
24 increase by 17% over the period. Inflation was limited to 2% per year, but  
25 the cost of electricity under the first two scenarios was held constant at  
26 current levels. Capital requirements were held to \$100 million per year for  
27 the entire company, the average annual amount required to cover both  
28 sustaining and growth capital.)

29

1 Q WHAT HAS THE NEW MADRID SMELTER ALREADY DONE TO  
2 REDUCE COSTS?

3 A A lot. We have a passionate focus on productivity supported by annual  
4 and three-year cost control and productivity goals. This corporate  
5 operating strategy supports the short-term performance and long-term  
6 viability of the New Madrid Smelter. Since 2009, Noranda has had an  
7 aggressive program to reduce its costs and increase productivity,  
8 achieving over \$295 million in productivity savings to date.

9 Every year, the New Madrid Smelter invests the best efforts of its  
10 employees and significant financial resources to reduce its costs to  
11 sustain its Missouri operations. Since 2008, the smelter's annual costs  
12 have been reduced by over \$100 million through our Comprehensive  
13 Cost-Out, Reliability and Effectiveness ("CORE") productivity program. If  
14 the cost of electricity were held constant, the New Madrid Smelter would  
15 now be able to make a pound of aluminum more efficiently and for less  
16 cost than in 2008. However, since 2008, our annual cost of electricity has  
17 gone up approximately \$44 million, wiping out all of our other net savings  
18 combined.

19 The New Madrid Smelter has attacked every operating cost that it  
20 can, and will continue to do so. But this represents only two-thirds of our  
21 costs, and that is unfortunately not enough. We must find an immediate  
22 and long-term solution to reduce our cost of electricity.

1           These savings are crucial to the viability and ongoing reinvestment  
2 in the New Madrid Smelter. Since 2007, Noranda has invested over \$205  
3 million to preserve, improve and grow the capability of the facility.

4           The New Madrid Smelter also plays a key role in our value-added  
5 growth strategy. We manufacture at the New Madrid Smelter high purity  
6 grades of aluminum as well as fabricated products – aluminum billet and  
7 aluminum rod. A key foundation of this strategy is the capability to  
8 manufacture cost competitive aluminum. To that end, Noranda has  
9 authorized \$38 million in capital to improve the New Madrid Smelter’s  
10 electrical efficiency, yielding an additional 25 million pounds of aluminum.  
11 This project is currently on hold until the viability of the smelter is solidified,  
12 and the cost of this project is on top of the planned \$38 million in Growth  
13 Capital expenditures that are contemplated as I discuss above.

14  
15 **Q   WHY IS THE COMMISSION PROCESS SO IMPORTANT TO**  
16 **NORANDA?**

17 **A**   Electricity is approximately one-third of the New Madrid Smelter’s cost,  
18 and while Noranda can bring market competition to bear on the cost of  
19 every other supply line of the New Madrid Smelter, electricity is the one  
20 cost we cannot directly control. Noranda greatly appreciates the  
21 Commission's decisions in Ameren Missouri’s last several rate cases to  
22 move Noranda’s rate toward cost of service. The New Madrid Smelter  
23 has continued to operate because of these decisions, the support of the



1 stakeholders, reliable operations, effective productivity programs and the  
2 strength of the Commission's process. Noranda respects the Commission  
3 process and seeks to strengthen this process by contributing evidence  
4 and engaging in constructive dialogue with all stakeholders.

5

6 **Q ARE OTHER WITNESSES TESTIFYING ON BEHALF OF NORANDA'S**  
7 **REQUEST?**

8 A Yes. In addition to my testimony, Noranda is sponsoring testimony of  
9 other witnesses. I have listed the other witnesses and provided a brief  
10 description of their testimonies.

11 ➤ Mr. Henry Fayne: Mr. Fayne's testimony addresses the competitive  
12 disadvantage Noranda faces as a result of the lower electric rates its  
13 competitors have secured.

14 ➤ Dr. Joseph H. Haslag: Dr. Haslag's testimony addresses the  
15 financial impact to the State of Missouri's economy were the Noranda  
16 Smelter to close.

17 ➤ Mr. Maurice Brubaker: Mr. Brubaker's testimony analyzes Ameren  
18 Missouri's rates with and without the Noranda smelter as an Ameren  
19 Missouri customer. He states that all Ameren Missouri consumers  
20 will ultimately benefit from keeping the Noranda Smelter in operation.

21 ➤ Mr. James R. Dauphinais: Mr. Dauphinais' testimony addresses  
22 actual net energy costs should the Noranda smelter be subject to  
23 closure. Mr. Brubaker relies on this testimony.

- 1           ➤   Congressman Jason Smith:  Congressman's Smith's testimony  
2                   addresses the economic benefits the continued operation of the  
3                   Noranda smelter brings to Southeast Missouri.
- 4           ➤   Senator Wayne Wallingford:  Senator Wallingford's testimony  
5                   addresses the economic benefits the continued operation of the  
6                   Noranda smelter brings to Southeast Missouri.
- 7           ➤   Senator Doug Libla:  Senator Libla's testimony addresses the  
8                   economic benefits the continued operation of the Noranda smelter  
9                   brings to Southeast Missouri.
- 10          ➤   Senator Gary Romine:  Senator Romine's testimony addresses the  
11               economic benefits the continued operation of the Noranda smelter  
12               brings to Southeast Missouri.
- 13          ➤   Representative Kent Hampton:  Representative Hampton's testimony  
14               addresses the economic benefits the continued operation of the  
15               Noranda smelter brings to Southeast Missouri.
- 16          ➤   Representative Steve Hodges:  Representative Hodges' testimony  
17               addresses the economic benefits the continued operation of the  
18               Noranda smelter brings to Southeast Missouri.
- 19          ➤   Representative Todd Richardson:  Representative Richardson's  
20               testimony addresses the economic benefits the continued operation  
21               of the Noranda smelter brings to Southeast Missouri.

- 1           ➤ Representative Shelley Keeney: Representative Keeney's' testimony  
2           addresses the economic benefits the continued operation of the  
3           Noranda smelter brings to Southeast Missouri.
- 4           ➤ Michelle Fayette: Ms. Fayette's testimony addresses Noranda's  
5           impact on the community in Southeast Missouri and to the Kenny  
6           Rogers Children's Center.
- 7           ➤ Glenna Shy: Ms. Shy's testimony addresses Noranda's impact on  
8           the community in Southeast Missouri and to the Sikeston/Bootheel  
9           Area United Way.
- 10          ➤ Emil Ramirez: Mr. Ramirez' testimony addresses the impact of  
11          Noranda as an employer to workers in New Madrid County.

12

13   **Q    DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

14   **A    Yes, it does.**

**Kip Smith's Exhibit A**

**is**

**HIGHLY CONFIDENTIAL**

**in its entirety**