

Exhibit No.:
Witness: Henry Fayne
Type of Exhibit: Direct Testimony
Issues: Rate Design and Noranda Impact
Sponsoring Party: Noranda Aluminum, Inc.
Case No.: ER-2010-0036

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

**In the Matter of Union Electric
Company, d/b/a AmerenUE's
Tariffs to Increase Its Annual
Revenues for Electric Service**

Case No. ER-2010-0036

Direct Testimony of Henry Fayne

On behalf of

Noranda Aluminum, Inc.

January 6, 2010

Noranda
Exhibit No. 421
Date 3-26-10 Reporter PF
File No. ER-2010-0036

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STATE OF OHIO)

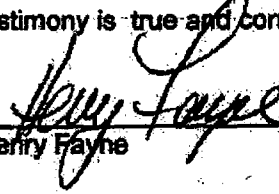
COUNTY OF FRANKLIN)

SS

Affidavit of Henry Fayne

Henry Fayne, being first duly sworn, on his oath states:

1. My name is Henry Fayne. I am a consultant residing at 1980 Hillside Drive, Columbus, Ohio 43221.
2. Attached hereto and made a part hereof for all purposes is my direct testimony, which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2010-0036.
3. I hereby swear and affirm that the testimony is true and correct.


Henry Fayne

Subscribed and sworn to before me this 5 day of January, 2010


Notary Public



SARAH MARQUAND
Notary Public, State of Ohio
My Commission Expires Nov. 5, 2013

Direct Testimony of Henry Fayne

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

2 **A:** My name is Henry W. Fayne. My business address is 1980 Hillside Drive,
3 Columbus, Ohio 43221.

4
5 **Q:** **PLEASE BRIEFLY DESCRIBE YOUR BUSINESS AND EDUCATIONAL**
6 **BACKGROUND.**

7 **A:** I have been a consultant in the electric energy sector since the beginning of
8 2005, following my retirement from American Electric Power (AEP). I was
9 employed by AEP in various positions for thirty years from 1974 through 2004,
10 including as Executive Vice President and Chief Financial Officer from 1998 until
11 2001, and as Executive Vice President Energy Delivery from 2001 until I retired
12 in 2004. I have a bachelors degree in economics from Columbia College and a
13 MBA in finance from Columbia Graduate School of Business.

14

15 **Q:** **HAVE YOU TESTIFIED PREVIOUSLY?**

16 **A:** Yes. During my tenure at AEP, I testified before the Regulatory Commissions in
17 the states of Indiana, Kentucky, Michigan, Ohio, Oklahoma, Texas, Virginia and
18 West Virginia on behalf of various operating companies of AEP. I have also
19 testified before the Federal Energy Regulatory Commission. Since I retired from
20 AEP, I have testified before regulatory commissions in the states of Kentucky,
21 Ohio and West Virginia.

22

23 **Q:** **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

1 A: The purpose of my testimony is to explain why this Commission should deny
2 AmerenUE's proposal to impose "take-or-pay" provisions in the Rate Schedule
3 LTS tariff. I also will provide information regarding electricity rates for other
4 smelters, which information is intended to support Noranda's requested rate
5 treatment in this proceeding.

6
7 Q: **WOULD YOU PLEASE EXPLAIN AMERENUE'S PROPOSAL TO IMPOSE A**
8 **"TAKE-OR-PAY" OBLIGATION ON NORANDA.**

9 A: AmerenUE has proposed that the minimum bill for Noranda would be equal to
10 100% of the demand and energy charges associated with its contract demand. If
11 Noranda were to reduce load from its contract demand (the level reflected in this
12 proceeding), AmerenUE would make such energy available for sale into MISO
13 and would credit Noranda with any revenues received to offset Noranda's
14 minimum bill obligation. Essentially, AmerenUE has proposed that it be
15 guaranteed its full revenue requirement from Noranda (both fixed and variable
16 costs) regardless of Noranda's operating level.

17
18 Q: **WOULD YOU PLEASE EXPLAIN WHY YOU ARE RECOMMENDING THAT**
19 **THE COMMISSION DENY AMERENUE'S REQUEST?**

20 A: There are numerous reasons why AmerenUE's request should be denied:
21 a) it is inconsistent with traditional ratemaking;
22 b) it is inconsistent with the contract approved in 2005;
23 c) it imposes an unquantifiable risk on Noranda;
24 d) it jeopardizes the viability of the smelter and the protection of jobs;
25 e) it is discriminatory; and

1 f) There are alternative approaches that can be implemented that would
2 not impose undue risk on Noranda or AmerenUE's other customers IF
3 the Commission concludes that AmerenUE's risk of a curtailment
4 should be mitigated.

5
6 **Q: PLEASE EXPLAIN WHY YOU HAVE CONCLUDED THAT THE AMERENUE**
7 **PROPOSAL IS INCONSISTENT WITH TRADITIONAL RATEMAKING.**

8 **A:** Based on my experience, ratemaking is designed to provide the utility with a
9 reasonable opportunity to earn a reasonable return on its invested capital. In
10 such circumstances, the utility assumes the risk of changes in load, whether such
11 changes occur because of weather or because of economic activity. AmerenUE
12 is proposing that 100% of the risk be shifted to a single customer, and that
13 AmerenUE be guaranteed its revenue requirement from that customer and,
14 thereby, protected from any downward change in load, whether that change
15 occurs because of weather (e.g., an ice storm) or economic activity. As an aside,
16 it is noteworthy that the AmerenUE proposal does provide AmerenUE upside by
17 crediting the increased revenues to AmerenUE if Noranda were to expand its
18 load. It is uncommon that ratemaking guarantees a revenue requirement.
19 Furthermore, although some industrial tariffs in other jurisdictions have minimum
20 bill requirements, I have not seen any that are set at 100% of contract demand,
21 that provide payment for 100% of demand and energy charges, or that extend for
22 the full contract term. Moreover, in most contracts, there are force majeure
23 provisions that relieve the smelter when the curtailment is due to circumstances
24 beyond its control. It is difficult to understand the logic of a proposal that would
25 shift the risk and cost to Noranda because the smelter could not accept power as
26 a result of a failure of the electric system due to an act of God; that is precisely

1 what would happen under AmerenUE's proposal if another ice storm disrupted
2 electric service and consequently the smelter's operation.

3 Moreover, under AmerenUE's proposal, AmerenUE not only is kept whole, but
4 has the potential of substantial windfall gains. As an example, admittedly
5 somewhat extreme to explain the point, if Noranda fully curtailed its load and if
6 AmerenUE were unable to sell any of the energy into MISO: (1) Noranda would
7 be required to pay the full demand and energy charges it would have incurred at
8 full load; (2) AmerenUE would receive the revenues equivalent to the levels
9 reflected in its revenue requirement; BUT (3) AmerenUE would not have incurred
10 the variable costs of production associated with the Noranda load; AND
11 THEREFORE (4) AmerenUE would have a windfall gain.

12

13 **Q: WHY IS THE AMERENUE PROPOSAL INCONSISTENT WITH THE TERMS**
14 **OF THE CONTRACT APPROVED IN 2005?**

15 **A:** In 2005, Noranda agreed to purchase its full load requirement from AmerenUE
16 for a term of 15 years pursuant to the terms and conditions of the LTS tariff.
17 Although Noranda understood and agreed that the applicable tariff, terms and
18 conditions could be modified in subsequent rate proceedings if approved by this
19 Commission, Noranda's decision to give AmerenUE an exclusive right to serve
20 its facility did not contemplate providing AmerenUE a guaranteed revenue stream
21 of \$140 million (at current rates) regardless of whether or not the smelter were
22 operating. The AmerenUE take-or-pay proposal is significantly more than a rate
23 change or a tariff provision. It is a major shift of risk to Noranda that was not
24 discussed or even contemplated in 2005.

25

1 **Q: PLEASE EXPLAIN WHY YOU DESCRIBE THE AMERENUE PROPOSAL AS**
2 **IMPOSING AN UNQUANTIFIABLE RISK ON NORANDA.**

3 A: The AmerenUE proposal provides that Noranda pay a minimum bill equal to
4 100% of its demand and energy charge assuming full operation. Since the rates
5 have not yet been set, it is not possible to quantify the minimum bill. Moreover,
6 those rates will vary over time as a result of the fuel clause, with the potential
7 imposition of environmental charges associated with greenhouse gases, as well
8 as with potential changes in base rates to cover traditional changes in the cost of
9 service.

10 The proposal introduces additional unknowns. AmerenUE proposes to credit
11 Noranda with the proceeds from sales of the curtailed energy into MISO.
12 However, neither the price nor the volume of such sales can be predicted.

13

14 **Q: WHY HAVE YOU ASSERTED THAT THE AMERENUE PROPOSAL**
15 **JEOPARDIZES THE VIABILITY OF THE SMELTER AND THE PROTECTION**
16 **OF JOBS?**

17 A: As I indicated above, the impact of the AmerenUE proposal is unquantifiable
18 because the tariff has not been set and because the price and volume of third
19 party sales is unknown. But a review of the most recent load curtailment, caused
20 by the ice storm, is instructive.

21 As a result of an ice storm, Noranda was forced to curtail operations for more
22 than a year. As Mr. Smith explained in his testimony, full operation is not
23 expected until April 2010. During this extended curtailment, Noranda had
24 significantly reduced revenues and incurred substantial costs to repair and restart
25 the smelter. Had the AmerenUE proposal been in effect, Noranda would also
26 have had a minimum bill obligation of about \$12 million a month, an amount that

1 would, at best, be only partially offset by sales into MISO because of depressed
2 energy prices and significantly reduced demand. This additional cost, coupled
3 with the potential of future minimum bill payments and unknown tariff changes,
4 might have precipitated a decision to shut down or temporarily lay off employees.
5 It would be inappropriate to speculate such an outcome; however, the imposition
6 of a minimum bill imposes an additional risk and an additional cost that makes
7 continued operation and the protection of jobs even more difficult at a time when
8 the aluminum industry is depressed.

9
10 **Q: WHY DO YOU CONCLUDE THAT THE AMERENUE APPROACH IS**
11 **DISCRIMINATORY?**

12 **A:** Not surprisingly, no other customer of AmerenUE has such an onerous take-or-
13 pay obligation.

14
15 **Q: YOU INDICATED THAT, IF THE COMMISSION CONCLUDES THAT**
16 **AMERENUE'S RISK OF A NORANDA CURTAILMENT SHOULD BE**
17 **MITIGATED, THERE ARE ALTERNATIVE APPROACHES THAT CAN BE**
18 **IMPLEMENTED THAT WOULD NOT IMPOSE UNDUE RISK ON NORANDA**
19 **OR AMERENUE'S OTHER CUSTOMERS. WOULD YOU PLEASE**
20 **ELABORATE?**

21 **A:** In his testimony, AmerenUE witness Wilborn Cooper explained that the tariff
22 change is necessary to mitigate a potential future occurrence of the loss that
23 AmerenUE suffered as a result of the ice storm that caused a shutdown of the
24 Noranda smelter. That loss occurred because 95% of the revenue from the sale
25 of power, that otherwise would have been used (and paid for) by Noranda,
26 flowed to other customers through the new fuel clause. A simple alternative to

1 the AmerenUE proposal would be to modify the fuel clause to allow the revenues
2 from sales of energy, that otherwise would have been consumed by Noranda, to
3 be excluded from the fuel clause. On that basis, AmerenUE would be made
4 whole to the extent that the energy were sold, and the other customers would be
5 held harmless; that is, other customers would be in the same position as they
6 would have been had consumption by Noranda not been curtailed. This
7 approach would be more consistent with traditional ratemaking since it would be
8 the utility, not a single customer, that would bear the risk of load fluctuations.
9

10 **Q: AT THE OUTSET, YOU INDICATED THAT YOU WOULD PROVIDE**
11 **INFORMATION REGARDING THE ELECTRICITY RATES FOR OTHER**
12 **SMELTERS. WOULD YOU PLEASE PROVIDE THAT INFORMATION.**

13 **A:** Exhibit HWF-1 shows the electricity rates for each of the US smelters operating
14 in 2009, as well as the rates for other smelters outside the United States. As
15 shown on that exhibit, in 2009, the electricity rate for the New Madrid Smelter
16 was \$35.67/Mwh, which placed New Madrid among the highest-cost smelters in
17 the US, and almost 25% higher cost than the average non-US smelters,
18 excluding China. Moreover, if the Commission were to approve AmerenUE's
19 request, the 2010 rate for the New Madrid Smelter would exceed \$41/Mwh.
20

21 **Q: WHY DO YOU EXCLUDE CHINA?**

22 **A:** China must be excluded because China heavily subsidizes its industry. In simple
23 terms, the high cost of electricity is offset by the low cost of labor.
24

1 **Q: WHY IS IT A CONCERN THAT THE NEW MADRID SMELTER HAS A HIGH**
2 **COST RELATIVE TO OTHER US SMELTERS AND TO SMELTERS IN THE**
3 **REST OF THE WORLD?**

4 **A:** As Mr. Smith explained, aluminum is a commodity, sold at a price that is based
5 on global supply and demand established by trading activity on the London Metal
6 Exchange, or LME. In simple terms, the price is set by the marginal producer.
7 Therefore, if other producers have a lower cost of production, which is driven
8 primarily by the cost of electricity, then the selling price will reflect such costs,
9 and the higher cost producer will not be able to compete since the price will not
10 cover the higher cost of production. The New Madrid Smelter competes with all
11 other smelters regardless of location. If its costs are in the third or fourth quartile,
12 its continued viability is threatened, particularly during economically depressed
13 period such as we are experiencing today.

14

15 **Q: ARE YOU AWARE OF ANY RATE CHANGES THAT AFFECTS THE US**
16 **SMELTERS SINCE 2009?**

17 **A:** Yes. Two significant changes have recently occurred. The Public Utilities
18 Commission of Ohio just approved an LME-indexed rate for Ormet Aluminum's
19 Hannibal smelter. And Alcoa recently announced a new long-term contract with
20 the Bonneville Power Administration for electric service to its Ferndale smelter.
21 The major significance of both those transaction is that the rates for the two
22 smelters have been substantially reduced from the levels shown on Exhibit
23 HWF-1. More importantly, and a major concern, is that the New Madrid Smelter
24 will be the second highest-cost smelter in the U.S. unless this Commission acts
25 favorably on Noranda's proposed rate change.

26 **Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

1 A: Yes, it does.

**ALUMINUM SMELTERS
COST OF ELECTRICITY
FOR THE YEAR 2009**

	Smelter Production (000 TPY)	Cost of Electricity (\$/Mwh)
Ferndale **	94	47.56
Mount Holly	229	43.96
Hannibal **	242	38.43
New Madrid	176	35.67
Alcoa Tennessee *	26	34.95
Warrick	272	31.10
Ravenswood *	15	30.46
Hawesville	200	29.32
Sebree	196	28.79
Massena West	130	23.30
Wenatchee	100	22.01
Massena East *	54	21.59
Total USA	1,734	33.36
China	6,814	47.90
Rest of World	28,335	28.69
TOTAL	36,883	32.46

* Shut down in 2009

** Recently received rate reductions effective in 2010

Source: CRU, an independent business analysis and consultancy group focused on the mining, metals, power, cables, fertilizer and chemical sectors.