Exhibit No.:
Witness: Henry Fayne
Type of Exhibit: Direct Testimony
Issue: Aluminum Industry
Sponsoring Party: Noranda Aluminum, Inc.
Case No.: EC-2014-_____

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 Missouri's Large Transmission Service Tariff to Decrease its Rate for Electric Service	**Case No. EC-2014-_____**

Direct Testimony of Henry Fayne

On behalf of

Noranda Aluminum, Inc.

February 7, 2014

In the Matter of Noranda Aluminum, Inc.'s Request for Revisions to Union Electric Company d/b/a Ameren Missouri's Large Transmission Service Tariff to Decrease its Rate for Electric Service	)	**Case No. EC-2014-01__**

STATE OF New York)
) **SS**
COUNTY OF New York)

Affidavit of Henry Fayne

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

1. My name is Henry Fayne. I am a consultant. My address is 140 East 83rd Street, New York, New York 10028.

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. EC-2014-01___.

3. I hereby swear and affirm that the testimony is true and correct.

Henry Fayne

Subscribed and sworn to before me this 28 day of January __, 2014.

Nicholas D. Petronio
Notary Public

NICHOLAS D PETRONIO
Notary Public - State of New York
NO. 01PE6277181
Qualified in Bronx County
My Commission Expires 3-4-17

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A: My name is Henry W. Fayne. My business address is 140 East 83rd Street, New York, New York 10028

Q: PLEASE BRIEFLY DESCRIBE YOUR BUSINESS AND EDUCATIONAL BACKGROUND.

A: Following my retirement from American Electric Power (AEP) at the end of 2004, I have been a consultant in the electric energy sector primarily negotiating electric energy contracts for various aluminum smelters in the United States. I was employed by AEP in various positions for thirty years from 1974 through 2004, including as Executive Vice President and Chief Financial Officer from 1998 until 2001, and as Executive Vice President Energy Delivery from 2001 until I retired in 2004. I have a bachelors degree in economics from Columbia College and an MBA in finance from Columbia Graduate School of Business.

Q: HAVE YOU TESTIFIED PREVIOUSLY?

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

Virginia. I have also testified before this Commission in Case No. ER-2010-0036, Case No. EO-2010-0255 and Case No. ER-2011-0028.

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

A: The purpose of my testimony is to provide information regarding the cost of electricity at other aluminum smelters and the regulatory treatment other states are providing to support the continued operation of aluminum smelters.

Q: WHY IS THE COST OF ELECTRICITY OF SUCH IMPORTANCE FOR ALUMINUM SMELTERS?

A: Aluminum is a global commodity, much like copper, nickel, zinc and oil. It is sold at a price that is based on global supply and demand and established by trading activity on the London Metal Exchange, or LME. An individual smelter is, in effect, a price taker and cannot set the selling price of the base product; therefore, the success or viability of a specific smelting operation is determined primarily by its cost of production.

The cost of production will vary among smelters based on the cost of goods and services as well as the configuration of the plant. However, in general, the cost of alumina, labor and electricity accounts for 75%-80% of the cost, with alumina and electricity each comprising about one-third of

the cost of production. But it is the cost of electricity that most significantly determines the ongoing success or viability of an aluminum smelter, particularly in the depressed market we have recently been experiencing.

That outcome is most dramatically shown by the shifts in production. In the U.S. in 1980, there were 32 smelters, producing more than 5 million metric tons. Today, there are only 9 smelters operating in the U.S., producing about 1.8 million metric tons annually. In every instance, the smelter shut down because of high power costs.

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

A: Exhibit HWF-1 shows the electricity rates for each of the U.S. smelters currently operating, as well as the rates for smelters outside the United States. As noted on that exhibit, the source of the data is CRU, an independent business analysis and consultancy group that is generally used in the industry as a source of such data. As shown on that exhibit, the electricity rate for the New Madrid smelter is $41.2/MWh, which represents the fourth highest electricity rate among U.S. smelters for 2013, and a rate that is more than 39% higher than the average rate paid by non-U.S. smelters, excluding China. At the rate requested in this

proceeding, New Madrid would fall near the middle of the U.S. smelters and still be above the global average.

Q: WHY DO YOU EXCLUDE CHINA?

A: China must be excluded because China heavily subsidizes its industry. In simple terms, the high cost of electricity is offset by the low cost of labor. But it is noteworthy that China has recently begun to discount energy costs as well to support its aluminum production.

Q: WHY IS IT A CONCERN THAT THE NEW MADRID SMELTER HAS A HIGH COST RELATIVE TO OTHER U.S. SMELTERS AND TO SMELTERS IN THE REST OF THE WORLD?

A: As Mr. Smith explained, aluminum is a commodity, sold at a price that is based on global supply and demand established by trading activity on the London Metal Exchange, or LME. The price is set by the marginal producer, which means that if other producers have a lower cost of production, which is driven primarily by the cost of electricity, then the selling price will reflect such costs, and the higher cost producer will not be able to compete since the price will not cover the higher cost of production. The New Madrid Smelter competes with all other smelters, regardless of location. If its costs are high relative to other producers, its continued viability is at risk, particularly if the aluminum market suffers a downturn such as we are currently experiencing.

Q: AT THE OUTSET, YOU INDICATED THAT YOU WOULD DESCRIBE THE REGULATORY TREATMENT THAT HAS BEEN PROVIDED IN OTHER JURISDICTIONS TO ADDRESS THE SPECIFIC NEEDS OF ALUMINUM SMELTERS. PLEASE PROVIDE THAT INFORMATION.

A: As I explained above, aluminum smelters are uniquely energy intensive and sensitive to the price of electricity. As a result, the number of smelters remaining in the U.S. has declined dramatically. Therefore, although not always successful, several states have taken steps to support the continued operations of the smelters in their state and to protect the high paying jobs. I have been directly involved in the negotiation of rates in Kentucky, Ohio and West Virginia, but I am familiar with terms of the power arrangements for most of the smelters operating in the United States. In broad terms, the regulatory treatment has included long term special contracts that provide discounted rates in return for a commitment from the smelter to make capital investments and retain a certain employment level. In some cases, the treatment has tied the discount to the price of aluminum on the London Metal Exchange.

Q: WOULD YOU PLEASE PROVIDE SOME SPECIFIC EXAMPLES?

A: Alcoa's Massena smelters in New York State have the lowest electricity rate in the U.S. as a result of a special contract between Alcoa and the New York Power Authority (NYPA). The NYPA approved a 30-year contract (July 1, 2013 – June 30, 2043) with an initial rate about

$21.00/MWh. The rate is subject to annual escalation based on various published indices and is also subject to adjustment based on the LME price of aluminum, although such adjustments are capped. In return, Alcoa agreed to invest $600 million in its plant and to maintain a minimum employment of about 1000.

In 2009, the Kentucky PSC approved a 25-year contract between Big Rivers Electric Corporation and two aluminum smelters currently owned by Century Aluminum, Hawesville and Sebree. In response to rapidly rising power costs, however, the Kentucky PSC approved Century Aluminum's request to terminate the Hawesville contract with Big Rivers before the end of its contractual term, allowing Century Aluminum to purchase power from the market instead. The market price of electricity is expected to be in the range of $36-$37/MWh, compared to the $49/MWh price the Hawesville Smelter had been paying to Big Rivers. As a consequence of the Hawesville contract cancellation, Big Rivers requested a $74.5 million rate increase primarily to cover the fixed costs that the smelter had been paying. The Kentucky PSC approved a $54 million increase. Century Aluminum has also given Big Rivers a notice of early termination for the Sebree Smelter, which will result in a contract termination in January 2014. It is expected that the Sebree Smelter will be granted similar treatment and will be permitted to terminate the contract without penalty and purchase its power from the market beginning in

January 2014. Big Rivers has already filed a request for a $70 million rate increase to cover the lost revenues associated with the contract termination. If granted, that rate increase would be on top of the $54 million just granted.

In 2009, the Ohio PUC approved a Special Arrangement for Ormet's Hannibal Smelter, which provided discounted rates tied to the LME and employment levels at the smelter. To the extent that the rate paid by the smelter was less than the tariff, the shortfall was allocated to other customers. Through 2013, more than $200 million was allocated to and paid by other customers. In 2013, Ormet requested a modification of the agreement to provide additional relief. The request was not approved; as a result, the Ormet smelter shut down this past October.

In West Virginia, the Public Service Commission approved a Special Contract for the Ravenswood Smelter which indexed the price paid for electricity to the LME. To the extent there was a shortfall between the price paid by the smelter and the tariff rate, other customers were required to make up the difference. Nonetheless, because of the limits of the discount and the consequent shortfall in cash flow, the smelter was shut down in 2009. In 2012, in an effort to support a restart of the smelter, the legislature passed a bill (Senate Bill 256) that provided a mandate for the Commission to approve special contracts for energy intensive industry to

attract and retain jobs; the legislation authorizes the commission to allocate to other customers any shortfall created. In addition, in 2012, the legislature passed additional legislation that provided tax credits to energy intensive businesses. In 2013, the West Virginia PSC approved a new special contract for the Ravenswood Smelter that would provide an annual discount up to $40 million. Century Aluminum concluded that the $40 million annual discount was not sufficient to justify a restart of the smelter at current LME prices.

Q: DO YOU BELIEVE THAT NORANDA'S REQUEST IS COMPARABLE TO THE TREATMENT OTHER SMELTERS HAVE OBTAINED IN OTHER STATES?

A: Yes. In fact, Noranda's proposal is more moderate than the special arrangements provided to smelters in other states because even with the lower rate Noranda has proposed, the price that Noranda will pay for electricity will still cover all of the variable costs and some of the fixed costs of electricity that would normally be allocated to the smelter. On that basis, other customers pay lower rates than they would be if the smelter were forced to shut down. And of course, more than 900 jobs will be maintained in the state.

Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A: Yes, it does.

Henry Fayne's
Schedule HWF-1
is
HIGHLY CONFIDENTIAL
in its entirety