Exhibit No.:	
Issue:	Noranda Rate
Witness:	Thomas N. Harris
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Noranda Aluminum, Inc.
Case No.:	ER-2014-0258
Date Testimony Prepared:	December 19, 2014

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase its Revenues for Electric Service	))))))	**Case No. ER-2014-0258**

Direct Testimony of

Thomas N. Harris

On behalf of

Noranda Aluminum, Inc.

December 19, 2014

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In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase its Revenues for Electric Service	)	**Case No. ER-2014-0258**

STATE OF CALIFORNIA	)	
	)	**SS**
COUNTY OF SAN MATEO	)	

Affidavit of Thomas N. Harris

Thomas N. Harris, being first duly sworn, on his oath states:

1. My name is Thomas N. Harris.
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-2014-0258.
3. I hereby swear and affirm that the testimony is true and correct.

Thomas N. Harris

Subscribed and sworn to before me this 19th day of December, 2014.

WADE J. HALL
Commission # 1983128
Notary Public - California
San Mateo County
My Comm. Expires Jun 23, 2016

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase its Revenues for Electric Service	)	**Case No. ER-2014-0258**

Direct Testimony of Thomas N. Harris

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Thomas N. Harris. My address is 10 Woodhill Drive, Redwood City, CA 94061.

Q WHAT IS YOUR OCCUPATION AND BACKGROUND?

A I am a banker with a specialty in leveraged finance for corporations across a variety of industries, including Technology, Commodities, Industrials and Energy. I am, and have been since July 2013, a Director at Silicon Valley Bank in Palo Alto, California, where I provide financing advice and loan syndication services to technology companies and private equity firms that issue corporate loans. I formerly worked in investment banking, from March 2006 to May 2009, and from July 2010 to October 2012, at Merrill Lynch & Co. and its successor firm Bank of America Merrill Lynch, specializing first in leveraged finance and later in software industry coverage. While at Merrill Lynch, I advised clients on raising over $13 billion of capital in the

leveraged finance markets. Prior to that time, I was at TD Securities, the investment banking unit of TD Bank, from 1997 to 2006, specializing in Leveraged Finance, including high yield bonds and leveraged loans. I hold a Bachelor of Science from NYU Stern School of Business and an MBA with honors (Beta Gamma Sigma) from Columbia Business School.

Q HOW ARE YOU FAMILIAR WITH NORANDA?

A While working in the Leveraged Finance group at Merrill Lynch in New York, NY, I participated in the financing of the acquisition of Noranda by Apollo Group. A few years after the acquisition, I worked for 14 months, from June 2009 through July 2010, for Noranda. In addition, while at Merrill Lynch and later at Noranda, I became intimately familiar with the forward curve for price of primary aluminum on the London Metals Exchange, or LME.

Q WHAT WERE YOUR DUTIES WHILE EMPLOYED BY NORANDA?

A I was first Director and then Vice President of Strategic Development, where my duties included running the financial modeling, capital markets activities and mergers and acquisitions in conjunction with senior management.

Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS CASE?

A The purpose of my testimony is to demonstrate that without Noranda's requested rate relief, Noranda will be unable to obtain access to capital

necessary to operate the New Madrid Smelter and as a result will be required to close the smelter.

Q HAVE YOU REVIEWED MR. BOYLE'S TESTIMONY IN THIS CASE?

A Yes.

Q PLEASE STATE YOUR UNDERSTANDING OF MR. BOYLE'S TESTIMONY?

A Mr. Boyles presents what he calls financial curves for primary aluminum prices and corresponding financial models for the company's projected results, as he supports his conclusion that Noranda will be required to close the New Madrid Smelter due to an inability to obtain debt financing unless it obtains electric rate relief. He explains that increases in Noranda's cost of electricity have caused Noranda to be unable to obtain financing for its proposed rod mill ** _____

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_____**. Mr. Boyles points out that lenders, debt investors and the credit rating agencies look at both historical and projected financial results when analyzing a company's credit-worthiness and, thus, 2015 to 2021 are critical time periods for Noranda to exhibit stronger cash flow and a healthy financial profile to support a refinancing of the ABL, given the planned undertaking of refinancing activities in early 2016 and 2018. He also explains the measures management has taken and will continue to

take to increase efficiency, which are vital, in addition to the requested rate relief, for Noranda to remain financially viable. He states that without the requested rate relief, Noranda will be required to cease operation of the New Madrid Smelter.

Q HAVE YOU REVIEWED THE FINANCIAL MODEL ATTACHED AS EXHIBIT A TO MR. BOYLE'S TESTIMONY?

A Yes, both the hard copy and in native electronic form.

Q DO YOU AGREE WITH MR. BOYLE'S CONCLUSION THAT NORANDA WILL PROBABLY BE UNABLE TO OBTAIN DEBT FINANCING NECESSARY TO KEEP THE NEW MADRID SMELTER OPEN WITHOUT RATE RELIEF?

A Yes. Based upon my review of the financial model, I come to the same conclusion that Mr. Boyles does, namely that Noranda will be unable to secure financing to maintain operations without a sustainable power rate such as that in Noranda's Proposed Rate Structure. Dr. Schwartz's multi-scenario analysis also supports this conclusion. Even with the savings under Noranda's proposed rate and with the continued efficiency measures that will be undertaken by Noranda's management, ** _____ _____ **. However, the new power rate and long-term stability provided by the 7-year proposed term will have a meaningful positive impact on the cost structure

of Noranda, making it significantly more likely that Noranda will be able to obtain credit and maintain operations at the smelter.

Q CAN NORANDA MERELY RAISE ADDITIONAL CAPITAL THROUGH ISSUANCE OF DEBT OR EQUITY WITHOUT FIRST CHANGING ITS ECONOMIC METRICS?

A No. Based upon my experience as a banker and leveraged financier, Noranda will be unable to raise capital without first fundamentally improving its cash flow and thereby demonstrating its long-term viability. Lenders loan money that they have a reasonable expectation will be repaid, with interest, and equity owners invest money for a return, but typically will not invest in a company with Noranda's financial metrics, particularly where they perceive a meaningful risk of financial distress and impairment in long-term viability that could completely wipe out their equity investment.

Noranda's leverage ratio is at nearly 7x its last twelve-months' earnings before income, taxes, depreciation and amortization, as adjusted for various non-recurring and non-cash items, or EBITDA. EBITDA is a primary measure used by bankers and investors as a proxy for cash flow generated by a firm and leverage is a key measure of credit worthiness and financial health.

Other balance sheet and market value based leverage ratios are also extremely high, including Noranda's ratio of total liabilities to book capitalization, which is 90% and its Net Debt to Enterprise Value, which is 70%. Net Debt just means debt less cash on the balance sheet and Enterprise Value is a firm's public equity market value plus Net Debt.

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No bank, to my knowledge, having spent over 15 years in the leveraged finance markets, will lend to such a highly leveraged company, absent an immediate expectation for a fundamental improvement in financial metrics and a belief in the medium to long-term viability of the company. Similarly, no other debt investor is likely to lend and no equity investor is likely to invest new capital in such a company. The current drain on cash flow caused by Noranda's unsustainable power rate will not allow the company to be considered an attractive borrower to banks or debt investors or an attractive investment for equity investors. This is further demonstrated by

Dr. Schwartz's multi-scenario analysis, which shows Noranda's performance under various aluminum price scenarios. This analysis includes both scenarios that assume no change to Noranda's current power rate, and scenarios that assume the reduced power rate proposed by Noranda. Similar to the financial ratios I mentioned earlier, which are based on historical cash flow and current and book values of liabilities and equity, ** [redacted] **.

Q IF NORANDA IS ABLE TO SAVE APPROXIMATELY $40 MILLION PER YEAR FROM A LOWER POWER RATE, COUPLED WITH OTHER SAVINGS IT HAS PROPOSED UNDER ITS EFFICIENCY PROGRAM, WILL ITS ABILITY TO RAISE CAPITAL IMPROVE?

A Absolutely. Its ability to raise needed capital and maintain ongoing access to the capital markets for financing, refinancing and letters of credit, will be significantly enhanced upon securing the proposed power rate. From the change in the proposed power rate alone, which for the last twelve months would have represented a savings of $34 million, leverage drops from

almost 7x to less than 5x on a pro forma basis. Pro forma, in this case, simply means looking at Noranda's financial performance over the last twelve-month period and adjusting it higher as if the new proposed power rate were in effect during the entire period. While leverage approaching 5.0x is still generally considered high, the new power rate represents a step change in the health and sustainability of the firm and Noranda will immediately become a more attractive borrower once it has a sustainable power rate. With the proposed decrease in power rate, yielding approximately $40 million or more of savings per year, together with the efficiency initiatives being undertaken at Noranda, I would expect Noranda would likely be able to refinance its ABL and other indebtedness as well as obtain financing for its important projects in the future. Looking at the same financial model and forward curve that Mr. Boyles references in his testimony, I can conclude that the business, once benefiting from a sustainable power rate, should be able to reduce Net Debt each year, ultimately produce free cash flow and reduce leverage considerably, from its pro forma ratio of under 5.0x to a ratio **_____ _____**. While financially, at the lower power rate, Noranda's future viability and ability to thrive is still not guaranteed, the model suggests that Noranda will have a solid chance to survive and grow.

Q WHY DOES THE RATE NEED TO BE THE PROPOSED $32.50/MWh RATE AND NOT SOME HIGHER RATE, SUCH AS $35/MWh?

A In the event that the proposed power rate is not obtained, and a higher rate is granted, each $1 of higher power rate results in a hit to EBITDA of $4.2 million. So, as an example, with a $35 rate, Noranda would lose $10.5 million per year from its model every year and this would have a strong detrimental effect on its ability to reduce debt and produce free cash flow. Another illustration of this fact is exemplified in Dr. Schwartz's testimony and analysis, which suggests that the proposed $32.50 rate under various scenarios for volatility in aluminum prices, **_____ _____**, does allow Noranda to reduce leverage over time through 2021, as shown in its debt/equity ratio. Absent the lower power rate, leverage steadily increases and Noranda loses its viability as it is unable to refinance and continue to fund its operations. Therefore, at higher rates, Noranda is unlikely to be able to access the capital markets.

Q PLEASE SUMMARIZE YOUR TESTIMONY.

A Without the requested rate relief, Noranda lacks access to capital necessary to sustain the operations of the New Madrid smelter. Without a sustainable power rate, Noranda has questionable long-term viability and will be unable to attract debt or equity capital. With the efficiency savings proposed by Noranda, coupled with the proposed savings in power costs, I

do, however, believe that Noranda can raise capital by issuing debt or equity, as its model suggests an ability to ultimately return to a creditworthy and healthy financial state.

Q DOES THIS CONCLUDE YOUR TESTIMONY.

A. Yes.