Exhibit No.:	______________
Issue(s):	Policy and Rate Design
Witness/Type of Exhibit:	Mantle/ Surrebuttal
Sponsoring Party:	Public Counsel
Case No.:	EC-2014-0224

SURREBUTTAL TESTIMONY

OF

LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

NORANDA ALUMINUM, INC.

CASE NO. EC-2014-0224

May 30, 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-2014-0224**

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:

1. My name is Lena M. Mantle. I am a consultant for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Lena M. Mantle

Lena M. Mantle

Subscribed and sworn to me this 30th day of May 2014.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

KENDELLE R. SEIDNER
My Commission Expires
February 4, 2015
Cole County
Commission #11004782

Kendelle R. Seidner

Kendelle R. Seidner
Notary Public

My Commission expires February 4, 2015.

SURREBUTTAL TESTIMONY

OF

LENA M. MANTLE

NORANDA ALUMINUM, INC.

CASE NO. EC-2014-0224

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Lena M. Mantle and my address is 1007 Las Brisas Ct., Jefferson City, Missouri 65101. I am a consultant testifying on behalf of the Office of Public Counsel ("OPC").

Q. PLEASE DESCRIBE YOUR EXPERIENCE AND YOUR QUALIFICATIONS.

A. I worked for the Staff of the Missouri Public Service Commission ("Staff") from August 1983 until I retired in December 2012. During that time I worked as an Economist, Engineer, Engineering Supervisor and Manager of the Energy Department. Attached as Schedule LMM-1 is a brief summary of my experience with Staff and a list of the cases in which I filed testimony, rulemakings in which I participated and reports to which I contributed while I was employed at the Missouri Public Service Commission ("Commission"). I am a Registered Professional Engineer in the State of Missouri.

Q. WOULD YOU SUMMARIZE THE RECOMMENDATIONS OF THE OPC CONTAINED IN THIS TESTIMONY?

A. OPC makes the following recommendations in this testimony:

1. OPC recommends that the Commission not adopt the exemplar tariff sheets proposed by Noranda Aluminum, Inc. ("Noranda"). If the Commission grants Noranda the relief that it requests, either in full or in part, OPC makes the following recommendations regarding rate design:

A. Any revenue requirement shift be equally applied to all classes, including the lighting class, as proposed in the rebuttal testimony of Staff witness Mike Scheperle;

B. For the Residential and Small General Service ("SGS") rate classes, any revenue requirement shift be applied only to the volumetric charge;

C. Any reduction to Noranda's revenue requirement not be fully borne by ratepayers; and

D. Require Noranda to provide exemplar tariff sheets consistent with OPC's recommendations.

2. The Commission should, in determining whether to grant the relief Noranda has requested, consider Noranda's willingness to agree to certain commitments. These should include commitments regarding:

A. Continued employment levels at the smelter;

B. Guaranteed amounts of additional capital investments in the smelter;

C. Capitalization strategies that preserve the smelter's ability to continue to operate; and

D. Noranda returning, over time, any discount provided to Noranda by Ameren Missouri's other ratepayers.

Q. WHILE ON THE COMMISSION'S STAFF, DID YOU WORK ON ANY ELECTRIC CASES THAT INVOLVED NORANDA?

A. Yes. To the best of my recollection, I worked on every electric case and rulemaking that involved Noranda or that Noranda was a party to before the Commission. Although I did not file testimony for Staff regarding Ameren Missouri's[1] request for a Certificate of Convenience and Necessity ("CCN"), Case No. EA-2005-0180 ("CCN case"), I was present for the discussions regarding the impact of Ameren Missouri serving Noranda and assisted Dr. Michael Proctor in the analysis he conducted for his testimony for Staff in that case.

Q. ARE YOU AWARE OF THE IMPACT THAT NORANDA HAS ON THE ECONOMY AND THE LIVELIHOOD OF THE MISSOURI CITIZENS IN SOUTHEAST MISSOURI?

A. Yes. I was present at several Commission local public hearings held in Southeast Missouri regarding Ameren Missouri rate increases. At these hearings, I heard testimony where local business owners and Noranda employees requested that the full requested increase not be applied to Noranda because of the potential impact. Also, one of my responsibilities as Manager of the Energy Department was to read the public comments received in response to rate increase filings. There were always some comments submitted, again from business owners and the public, regarding the potential negative impact of increasing Noranda's electric rates. Accordingly, I understand that Noranda is vital to the economy of Southeast Missouri. While I have not independently quantified the impact of Noranda closing down its New Madrid smelter, I do believe that closing the smelter would have a significant impact on Southeast Missouri.

Q. HAVE YOU EVER BEEN TO THE NEW MADRID SMELTER?

A. Yes, I had the privilege to tour the New Madrid smelter in August 2005 with several other Staff members.

[1] Then known as AmerenUE.

Q. ARE YOU AWARE OF ANY CUSTOMER OF AMEREN MISSOURI, OR ANY OTHER MISSOURI INVESTOR-OWNED ELECTRIC UTILITY THAT COMPARES TO NORANDA?

A. No, I am not. While the other investor-owned electric utilities in the state have large customers, I am not aware of any other customer that is comparable in electric energy requirements (demand of approximately 500 MW and a high load factor, i.e., a relatively flat load) to Noranda's operation at the New Madrid smelter.

Q. WHAT MAKES NORANDA'S NEW MADRID SMELTER A UNIQUE CUSTOMER?

A. Noranda is unique because it is the largest electric customer in Missouri. It is also unique in that it requires very constant, reliable power which it has procured from Ameren Missouri since June 2005. It is also the only retail electric customer in Missouri that can legally purchase electricity on the market.

PURPOSE

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Staff witness Mike S. Scheperle, Wal-Mart witness Steve W. Chriss and Ameren Missouri witnesses Matt Michels and William R. Davis. I will present the OPC positions, if the Commission grants, in full or in part, the relief requested by Noranda, regarding the rate design of any revenue requirement changes and the need for conditions to be accepted by Noranda.

Q. IF THE COMMISSION WERE TO GRANT NORANDA THE RELIEF THAT IT REQUESTS, DOES OPC HAVE A RECOMMENDATION REGARDING THE RATE THAT NORANDA SHOULD BE CHARGED?

A. Not at this time. The parties continue to offer additional evidence as to what an appropriate rate would be. Until such time as OPC has adequately and fully reviewed the totality of the parties' evidence with respect to the rate, OPC must oppose, for the time being, any rate relief. However, OPC does urge the Commission to carefully consider all costs of serving Noranda and the costs to Ameren Missouri's other customers as it considers granting the relief Noranda requests. These actual and opportunity costs should include, but not necessarily be limited to, market capacity and energy prices, transmission costs and applicable MISO charges.

<u>NEED FOR COMMITMENTS FROM NORANDA IF RELIEF IS GRANTED</u>

Q. WHAT ARE OPC'S RECOMMENDATIONS REGARDING CONDITIONS IF THE COMMISSION GRANTS NORANDA THE RELIEF IT REQUESTS?

A. OPC recommends that the Commission should, in determining whether to grant the relief Noranda has requested, consider Noranda's willingness to agree to certain commitments. These should include commitments regarding:

A. Continued employment levels at the smelter;

B. Guaranteed amounts of additional capital investments in the smelter;

C. Capitalization strategies that preserve the smelter's ability to continue to operate; and

D. Noranda returning, over time, any discount provided to Noranda by Ameren Missouri's other ratepayers.

Q. WHY IS OPC RECOMMENDING THE COMMISSION GRANT THE RELIEF NORANDA REQUESTS ONLY IF NORANDA AGREES TO CERTAIN CONDITIONS?

A. In the CCN case, the risks and the benefits of Ameren Missouri providing service to Noranda were carefully weighed by each party as they entered into a stipulation and agreement in the case. Now, in this complaint case, Noranda has asked the Commission to shift more risk to the customers and more benefit to Noranda, while holding Ameren Missouri harmless with respect to revenue requirement. On page 16 of his rebuttal testimony, Ameren Missouri witness Terry M. Jarrett lists conditions that have been placed on other smelters that have received special consideration with respect to their energy costs such as guaranteed employment and capital improvements at the smelters. Noranda witness Henry Fayne on page 6 of his direct testimony briefly mentions conditions such as commitments from smelters to make capital investments and retain employment levels in return for special treatment of their energy costs. However, as a part of its request of the Commission, Noranda did not make any such commitments to offset the additional risk that its request would place on Ameren Missouri's customers in exchange for the certainty in electric prices that Noranda would obtain if the Commission granted its request.

RATE DESIGN RESPONSE

Q. WHAT RECOMMENDATIONS IS OPC MAKING REGARDING RATE DESIGN?

A. OPC recommends that the Commission not adopt the exemplar tariff sheets for the LTS class as proposed by Noranda. If the Commission grants Noranda the relief that it requests, either in full or in part, OPC makes the following recommendations regarding rate design:

A. Any revenue requirement shift be equally applied to all classes, including the lighting class, as proposed in the rebuttal testimony of Staff witness Mike Scheperle;

B. For the Residential and Small General Service ("SGS") rate classes, any revenue requirement shift be applied only to the volumetric charge;

C. Any reduction to Noranda's revenue requirement not be fully borne by ratepayers; and

D. Require Noranda to provide exemplar tariff sheets consistent with OPC's recommendations.

Q. WHY SHOULD ANY REVENUE REQUIREMENT SHIFT APPLY TO ALL CLASSES OTHER THAN THE LTS CLASS?

A. In the last Ameren Missouri general rate increase case, Case No. ER-2012-0166, class cost-of-service ("CCOS") studies were filed in the case by Staff, Missouri Industrial Energy Consumers ("MIEC") and Ameren Missouri. Taking into account these studies, which all showed different costs to serve the rate classes, revenue neutral adjustments to the classes were agreed to by Staff, the Missouri Retailers Association, and the Midwest Energy Consumers' Group in the Revised Non-Unanimous Stipulation and Agreement filed on October 10, 2012, and approved by the Commission effective October 28, 2012. While OPC and Ameren Missouri did not sign this agreement, they did not oppose the agreement.

It is OPC's recommendation that the Commission, if it determines that a shift should be made in revenues, should minimize class impacts by maintaining the current allocation among the classes from the last general rate case until additional CCOS studies can be conducted.

Q. DID THE AGREEMENT IN THE LAST RATE CASE JUST APPLY TO THE CLASSES THAT MR. BRUBAKER SHOWS IN HIS DIRECT TESTIMONY?

A. No it did not. The agreement also included the lighting class.

Q. WHAT WOULD BE THE RESULT OF NOT INCLUDING THE LIGHTING CLASS IN ANY REVENUE REQUIREMENT SHIFT?

A. Staff's revenue neutral CCOS results, given on page 11 of Mr. Scheperle's rebuttal testimony, showed that the lighting class was providing a lower return than other customer classes and the Large General Service/Small Primary Service ("LGS/SPS") classes were providing the highest return. The lighting class was providing 10.67% less revenues than the fully distributed cost of serving the class and the LGS/SPS class was providing 7.28% more revenues than the fully distributed cost of serving the class. The Non-Unanimous Stipulation and Agreement resulted in the lighting class having a larger than average increase in revenue requirement and the LGS/SPS class having a smaller than average increase to bring both classes more in line with the cost of serving them.

If Noranda is granted the relief that it requests, in part or in full, and the shift in revenue is only applied to the non-lighting classes, as proposed by Mr. Brubaker, it could result in the lighting class again being supported by other customer classes. Therefore, until additional CCOS studies are completed, OPC joins Staff in its recommendation that any shift in revenues be applied to all customers, including the lighting class and the Metropolitan Sewer District.

Q. DOES OPC AGREE WITH ANY OF MR. SCHEPERLE'S OTHER PROPOSALS?

A. Yes, it does. As pointed out in on page 15 of Mr. Scheperle's rebuttal testimony, Mr. Brubaker does not correctly take into account pre-MEEIA and MEEIA costs (i.e., demand-side program costs incurred before and after the Commission approved Ameren's first energy efficiency plan) in determining the class revenue increases. OPC agrees with Mr.

Scheperle's recommendation that the amount of each class' increase be determined using the non-MEEIA revenue requirement.

Q. WHY IS THIS IMPORTANT?

A. Demand-side program costs are carefully accounted for and assigned to the classes. Therefore, any class revenue requirement increase should apply to only the non-MEEIA costs when determining how much the revenue from each class should be changed.

Q. HOW SHOULD THE COMMISSION APPLY ANY SHIFT TO THE RESIDENTIAL AND SGS CLASSES?

A. If the Commission grants any relief, OPC recommends that for the Residential and SGS classes, the shift only apply to the volumetric ($/kWh) charges on each rate.

Q. WHY SHOULD ONLY THE VOLUMETRIC CHARGES BE INCREASED?

A. The Commission, in its Report and Order in Case No. ER-2012-0166 on pages 110 and 111, found that:

> 12. Recently, in File Number EO-2012-0142, the Commission approved Ameren Missouri's first energy efficiency plan under the Missouri Energy Efficiency Investment Act. (MEEIA). Shifting customer costs from variable volumetric rates, which a customer can reduce through energy efficiency efforts, to fixed customer charges, that cannot be reduced through energy efficiency efforts, will tend to reduce a customer's incentive to save electricity.
>
> 13. Admittedly, the effect on payback periods associated with energy efficiency efforts would be small, but increasing customer charges at this time would send exactly to wrong message to customers that both the company and the Commission are encouraging to increase efforts to conserve electricity.

Ameren Missouri has continued its implementation of energy efficiency programs for its Residential and SGS classes. Increasing the customer charges at this time would send the wrong message to customers just as it would have in the rate case. Therefore, OPC recommends that any revenue shift to the Residential and SGS classes only be applied to the volumetric charge.

Q. WHAT IS OPC'S POSITION WITH REGARD TO WAL-MART REBUTTAL WITNESS STEVE W. CHRISS' RECOMMENDATION THAT ANY REVENUE SHIFT TO THE LGS, SPS AND LARGE PRIMARY SERVICE ("LPS") CLASSES BE APPLIED ONLY TO THE DEMAND-CHARGES OF THESE RATE CLASSES?

A. OPC has concerns regarding this recommendation. Ameren Missouri has determined the cost-effectiveness of its demand-side programs for its LGS, SPS, and LPS customers based on the current demand ($/kW) and energy ($/kWh) charges. If this relationship changes, it could impact the cost effectiveness of energy-efficiency changes that customers currently participating in the program are making. If only the demand charges increase, then energy-efficiency programs that have the greatest impact on the customers' demands will become more cost-effective. The programs that reduce energy more than demand will be less cost-effective.

Q. MR. SCHEPERLE ALLOCATES ALL OF THE ESTIMATED COST SHIFT OF GRANTING NORANDA'S REQUEST TO THE OTHER CLASSES IN SCHEDULE MSS-R3. DOES OPC AGREE WITH THIS APPROACH?

A. No, it does not. OPC recommends that, if the Commission grants Noranda the relief that it requests, any reduction to Noranda's revenue requirement not be fully borne by ratepayers. The Commission should require Ameren Missouri to absorb a portion of the burden resulting from any discount to Noranda.

Q. WHY SHOULD AMEREN MISSOURI ABSORB SOME OF THE REVENUE REDUCTION?

A. It is a matter of equity. Ameren Missouri receives unique benefits from continuing to serve the smelter, therefore, it should absorb a portion of any cost shift. Noranda's request as proposed and as Mr. Scheperle allocates, would hold Ameren Missouri harmless as far as revenue requirement is concerned.[2] As previously stated in this testimony, all parties that participated in the Stipulation and Agreement in the CCN case, including Ameren Missouri, weighed the benefits and risks that were associated with taking on a customer as large as Noranda when deciding to sign the Stipulation and Agreement.

When Ameren Missouri filed the CCN case, it saw benefits to serving Noranda; Ameren Missouri still derives benefits from Noranda today. Noranda's contract with Ameren Missouri provides a stable revenue stream to Ameren Missouri, as long as the smelter stays open and operating. While Ameren Missouri may be able to sell capacity and energy on the market at higher prices at this point in time, Ameren Missouri would not be assured of a sustained level of revenue from selling the energy and capacity on the market. Noranda also provides economic stability to Ameren Missouri customers in Southeast Missouri which enables these customers to pay their electric bills. Therefore, since Ameren Missouri is receiving substantial benefits from the smelter continuing to operate, OPC recommends that Ameren Missouri bear a portion of any shift in revenues.

Q. WHAT IS OPC'S RECOMMENDATION REGARDING THE LTS TARIFF SHEETS APPLICABLE TO ALUMINUM SMELTERS?

A. OPC recommends that the Commission not approve the proposed tariff sheets for the following reasons:

1. There should be no cap on future rate increases;

2. Noranda should be required to pay the Fuel and Purchased Power Adjustment Charge ("FAC");

3. Changes to the contract terms (Section 4) should not be made until Ameren Missouri, Noranda and the Commission have all had a chance to adequately analyze the proposed changes; and

4. Tariff sheets should not be closed to changes for the next ten years.

5. With respect to the rate itself, and depending on the all of the evidence received, Noranda's proposal may represent an unjust and unreasonable cost shift from one customer class to all other customer classes.

Q. WHY SHOULD FUTURE RATE INCREASES NOT BE CAPPED?

A. As Ameren Missouri witness Matt Michels pointed out on pages 30 and 31 in his rebuttal testimony, and based on my knowledge and experience in this area, there is great risk for significant increases in costs, in particular costs due to environmental regulations, over the next ten years. Placing a cap on the amount of future increases for one customer or one rate class places more of that price risk on other customer classes.

In addition, Noranda has received rate increases significantly less than the average Ameren rate increase in the last five general rate increase cases. Ameren Missouri witness William R. Davis quantifies these differences in a table on page 5 of his rebuttal testimony. The table compares the rate increases that Noranda has experienced to the average revenue requirement increase in the last five Ameren Missouri general rate increase cases. Copied

[2] OPC does recognize that there are other changes, as proposed in Mr. Brubaker's exemplar tariff sheets that do not hold Ameren Missouri harmless. These tariff items and OPC's recommendations regarding these items follow.

below is Mr. Davis' table for the Commission's convenience. The cumulative increase to the revenue requirement prior to Case No. ER-2007-0002 has been added to the bottom of the table.

Recent Ameren Missouri Rate Increases

Rate Case	Overall Increase	Noranda's Increase
ER-2007-0002	2.07%	-5.40%
ER-2008-0318	7.75%	6.10%
ER-2010-0036	10.40%	0.10%
ER-2011-0028	7.11%	5.20%
ER-2012-0166	10.05%	6.60%
Cumulative Increase	43.12%	12.67%

As Mr. Davis recounts on page 4 of his rebuttal testimony, the amount of increase in Noranda's revenue requirement as compared to Ameren Missouri's overall revenue requirement increase has been agreed to or not opposed by all the parties in all but one case. In that case, Case No. ER-2010-0036, there was an agreement or no opposition to Noranda receiving a reduction in its revenue requirement but the Commission determined that Noranda should have a small increase instead. In each of these cases, Noranda provided testimony on the potential impact of an increase in revenue requirement on its business feasibility and its profitability.

The disparity between the overall Ameren Missouri revenue requirement increases (43.12%) and Noranda's revenue requirement increases (12.67%) shows that Noranda is capable of presenting its position in general rate cases as well as the receptiveness of other parties to take into account Noranda's position. By placing a cap on the amount Noranda's rate could increase, neither the other parties or the Commission can take into account Noranda's business feasibility and profitability in setting Noranda's class revenue requirement as Noranda is asking the Commission to do in this case. It would, in effect, carry Noranda's current position forward until the cap was removed at some unknown time. If the Commission determines that there is merit to Noranda's request, the cap on rate increases would keep the Commission from returning to rates based on fully distributed costs for the LTS class until the tariff was changed.

Q. IS THERE A TEN-YEAR LIMIT ON THE CAP ON RATE INCREASES IN MR. BRUBAKER'S EXEMPLAR TARIFFS AS MR. DAVIS AND MR. SCHEPERLE ASSUME IN THEIR REBUTTAL TESTIMONY?

A. No, there is not. There is, however, a ten-year moratorium on changes to the terms and conditions in sections 1 through 8 of the tariff sheets.

Q. DOES OPC AGREE WITH MR. DAVIS' ASSERTION ON PAGE 8 OF HIS REBUTTAL TESTIMONY THAT THE 2% RATE CAP COULD RESULT IN AMEREN MISSOURI'S OTHER CUSTOMERS BEING "ON THE HOOK" TO SUBSIDIZE RATES FOR NORANDA WELL BEYOND A TEN-YEAR PERIOD?

A. Even though Mr. Davis assumes that the ten-year moratorium on changes to tariff sheets applies to the 2% cap, his concern is well founded based on past Ameren Missouri rate increases. If Noranda is granted a 2% cap on rate increases for 10 years its rates may be so low that to bring its rates up to a fully distributed cost rate would be a rate shock that would again threaten closure of the New Madrid smelter.

Q. DOES OPC AGREE WITH MR. SCHEPERLE'S RECOMMENDATION ON PAGE 3 OF HIS REBUTTAL TESTIMONY THAT NORANDA SHOULD BE REQUIRED TO PAY THE FAC CHARGE?

A. Yes, it does. Noranda in its testimony gives no reason why it should not be required to pay the FAC. The existence of the FAC provides uncertainty to the cost of energy for all of Ameren Missouri's customers just like it increases uncertainty about the cost of energy for Noranda. Likewise, the energy used by Noranda contributes to the cost of fuel to meet Ameren Missouri system requirements just as the usage of Ameren Missouri's other customers. Just as the existence of the other customers reduces the amount of energy and capacity Ameren Missouri can sell on the market, the existence of Noranda as a customer of Ameren Missouri reduces the amount of energy and capacity that it can sell as purchased power. Therefore, neither Noranda nor any other Ameren Missouri customer should be excluded from the FAC.

Q. SINCE NORANDA HAS A HIGH LOAD FACTOR, ISN'T IT RELATIVELY EASY TO DETERMINE THE FUEL COSTS OF PROVIDING IT ENERGY?

A. No. Noranda, like other customers is served by an integrated production system with varied resources. Resource variety is the key to providing low cost, reliable supply of energy to all customers; even customers as large as Noranda.

In addition, long-term fuel contracts often have price escalators. With no FAC, Ameren Missouri's other customers would be facing the increasing risk of escalating cost of fuel to meet Noranda's load between rate increase cases.

Q. IS RELIABLE ENERGY IMPORTANT TO THE NEW MADRID SMELTER?

A. Reliable energy is essential to the New Madrid smelter. The interruption in service due to the January 2009 ice storm shows exactly how important reliable service is to the smelter. When the power was interrupted, the aluminum hardened in the melting pots. It took Noranda over a year to get up to the usage that it had prior to the storm. So having a reliable source of energy is very important to Noranda. This is a risk that is considerably lessened with Noranda receiving electricity from Ameren Missouri because of the variety of energy resources of Ameren Missouri. Instead of paying a premium for this reduction in risk, Noranda is asking to pay below Ameren Missouri's fully distributed cost to provide it service.

Q. DID MR. BRUBAKER PROVIDE EXEMPLAR TARIFF SHEETS FOR THE FAC IF THE COMMISSION GRANTS NORANDA'S REQUEST NOT TO BE CHARGED THE FAC?

A. No, he did not.

Q. WOULD YOU BRIEFLY EXPLAIN WHAT WOULD NEED TO BE CHANGED ON THE FAC TARIFF SHEETS?

A. While not an exhaustive list, I am aware that the current FAC tariff sheets have a provision for Ameren Missouri to recover the fixed costs assigned to the LTS class should the New Madrid smelter close – either by choice or by the force of nature such as an ice storm. This provision would need to be reviewed. In addition, the definitions of the forecasted energy used to calculate the FAC and the actual energy used would need to be changed. A more thorough review of the tariff sheets may show that more changes need to be made if the Commission determines that Noranda does not have to pay the FAC.

Q. WHAT ARE OPC'S CONCERNS REGARDING SECTION 4 "CONTRACT TERMS" OF THE EXEMPLAR TARIFF SHEETS?

A. OPC has two concerns. The first is that this language would allow only Noranda to determine when the contract will end. Mr. Davis, in his rebuttal testimony describes how Noranda's load and the energy and capacity market impacts the resource planning process. A customer the size of Noranda that has the ability to meet its energy needs in the market plays into the resource planning process of Ameren Missouri. In my experience, proper resource planning should take into account the prospect of not serving Noranda when the current contract ends. This would free up approximately 550 MW of capacity and energy that could be used either to provide service to its other customers or to be sold on the market that has developed since Ameren Missouri began serving Noranda in June 2005. If only Noranda has the ability to end service, Ameren Missouri no longer has the option of, at the end of its contract with Noranda, using the capacity to serve its other customers. While this section of the tariff provides flexibility to Noranda, it removes an option from the resource planning process and adds an additional risk that should be included in the resource planning process.

Q. IF NORANDA ENDED ITS CONTRACT, WOULDN'T THAT PROVIDE MORE ENERGY AND CAPACITY FOR AMEREN MISSOURI TO SELL ON THE MARKET?

A. Yes, it would. However, the energy and capacity markets are constantly changing and the prices are not fixed. If the market prices would be below Ameren Missouri's costs, then the other customers will be left to pay the difference.

Q. WHAT IS OPC'S OTHER CONCERN WITH SECTION 4. CONTRACT TERMS?

A. OPC is also concerned about the provision of this section that could extend the current contract, which is set to end in 2020, by four years to 2024 without analysis by Ameren Missouri and the other parties regarding the impact of the extension of the contract. There was considerable analysis prior to the Stipulation and Agreement between the parties in the CCN case. There has not been time for the same level of analysis in this case. The same analysis and diligence needs to be conducted before changing the contract terms, even if it is just the contract terms in the tariff sheets and not the actual contract. If the Commission does decide to grant Noranda rate relief, it should not change the current contract terms through the tariff sheets. During these last six years of the current contract, all parties can work together to determine if the contract should be ended or the manner of any extension of the contract.

Q. WHAT IS OPC'S CONCERN REGARDING SECTION 9 OF MR. BRUBAKER'S EXEMPLAR TARIFF SHEETS WHICH WOULD CLOSE SECTIONS 1 THROUGH 8 OF THE TARIFF SHEETS FOR TEN YEARS?

A. OPC agrees with Mr. Michels' statements in his rebuttal testimony that a ten-year moratorium would expose Ameren Missouri and its other customers to considerable risk. The future is unknown. Forecasting what will happen in the energy industry in the next year is risky let alone determining what will happen over the next ten years. The changes in the energy market since Ameren Missouri began serving the New Madrid smelter on June 1, 2005, less than ten years ago, is considerable. While closing the tariff sheets for ten years would produce some certainty to Noranda regarding the terms and conditions, it shifts the risk of future uncertainty to Ameren Missouri and its customers. The only thing that

Noranda offers in its request to offset this shift in risk to Ameren Missouri and its customers is that the smelter might not close.

SUMMARY

Q. WOULD YOU SUMMARIZE OPC'S RECOMMENDATIONS?

A. OPC makes the following recommendations in this testimony:

1. The Commission not adopt the exemplar tariff sheets proposed by Noranda Aluminum, Inc. ("Noranda"). If the Commission grants Noranda the relief that it requests, either in full or in part, OPC makes the following recommendations regarding rate design:

A. Any revenue requirement shift be equally applied to all classes, including the lighting class, as proposed in the rebuttal testimony of Staff witness Mike Scheperle;

B. For the Residential and Small General Service ("SGS") rate classes, any revenue requirement shift be applied only to the volumetric charge;

C. Any reduction to Noranda's revenue requirement not be fully borne by ratepayers; and

D. Require Noranda to provide exemplar tariff sheets consistent with OPC's recommendations.

2. The Commission should, in determining whether to grant the relief Noranda has requested, consider Noranda's willingness to agree to certain commitments. These should include commitments regarding:

A. Continued employment levels at the smelter;

B. Guaranteed amounts of additional capital investments in the smelter;

C. Capitalization strategies that preserve the smelter's ability to continue to operate; and

D. Noranda returning, over time, any discount provided to Noranda by Ameren Missouri's other ratepayers.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

<u>Education and Work Experience Background for</u>
<u>Lena M. Mantle, P.E.</u>

I received a Bachelor of Science Degree in Industrial Engineering from the University of Missouri, at Columbia, in May, 1983. I joined the Research and Planning Department of the Missouri Public Service Commission in August, 1983 and worked under the direct supervision of Dr. Michael Proctor. I became the Supervisor of the Engineering Analysis Section of the Energy Department in August, 2001. In July, 2005, I was named the Manager of the Energy Department. The Energy Department was renamed the Energy Unit in August, 2011. I am a registered Professional Engineer in the State of Missouri.

In my work at the Commission from May 1983 through August 2001, I worked in many areas of electric utility regulation. Initially I worked on electric utility class cost-of- service analysis. As a member of the Research and Planning Department, I participated in the development of a leading-edge methodology for weather normalizing hourly class energy for rate design cases. I applied this methodology to weather normalize energy in numerous rate increase cases.

My responsibilities as the Supervisor of the Engineering Analysis section considerably broadened my work scope. This section of the Commission Staff was responsible for a wide variety of engineering analysis including electric utility fuel and purchased power expense estimation for rate cases, generation plant construction audits, review of territorial agreements, and resolution of customer complaints. As the Manager of the Energy Unit, I oversaw the activities of the Engineering Analysis section, the electric and natural gas utility tariff filings, the Commission's natural gas safety staff, fuel adjustment clause filings, resource planning compliance review and the class cost-of-service and rate design for natural gas and electric utilities.

I retired from the Commission on December 31, 2012

In my work at the Commission I have participated in the development or revision of the following Commission rules:

4 CSR 240-3.130	Filing Requirements and Schedule of Fees for Applications for Approval of Electric Service Territorial Agreements and Petitions for Designation of Electric Service Areas
4 CSR 240-3.135	Filing Requirements and Schedule of Fees Applicable to Applications for Post-Annexation Assignment of Exclusive Service Territories and Determination of Compensation
4 CSR 240-3.161	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.162	Electric Utility Environmental Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.190	Reporting Requirements for Electric Utilities and Rural Electric Cooperatives
4 CSR 240-14	Utility Promotional Practices
4 CSR 240-18	Safety Standards
4 CSR 240-20.015	Affiliate Transactions
4 CSR 240-20.090	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms
4 CSR 240-20.091	Electric Utility Environmental Cost Recovery Mechanisms
4 CSR 240-22	Electric Utility Resource Planning

<u>Contributed to the following Staff Direct Testimony Report</u>

ER-2007-0291	DSM Cost recovery
ER-2008-0093	Fuel Adjustment Clause, Experimental Low-Income Program
ER-2008-0318	Fuel Adjustment Clause
ER-2009-0090	Fuel Adjustment Clause, Capacity Requirements
HR-2009-0092	Fuel Adjustment Rider
ER-2010-0036	Environmental Cost Recovery Mechanism
ER-2010-0356	Resource Planning Issues
ER-2011-0028	Fuel Adjustment Clause
ER-2012-0166	Fuel Adjustment Clause

Case Listing

ER-84-105	Direct	Demand-Side Update
ER-85-128, et. al	Direct	Demand-Side Update
EO-90-101	Direct, Rebuttal & Surrebuttal	Weather Normalization of Sales; Normalization of Net System
ER-90-138	Direct	Normalization of Net System
EO-90-251	Rebuttal	Promotional Practice Variance
EO-91-74, et. al.	Direct	Weather Normalization of Class Sales; Normalization of Net System
ER-93-37	Direct	Weather Normalization of Class Sales; Normalization of Net System
ER-94-163	Direct	Normalization of Net System
ER-94-174	Direct	Weather Normalization of Class Sales; Normalization of Net System
EO-94-199	Direct	Normalization of Net System
ET-95-209	Rebuttal & Surrebuttal	New Construction Pilot Program
ER-95-279	Direct	Normalization of Net System
ER-97-81	Direct	Weather Normalization of Class Sales; Normalization of Net System; TES Tariff
EO-97-144	Direct	Weather Normalization of Class Sales; Normalization of Net System
ER-97-394, et. al.	Direct, Rebuttal & Surrebuttal	Weather Normalization of Class Sales; Normalization of Net System; Energy Audit Tariff
EM-97-575	Direct	Normalization of Net System
		Normalization of Net System;

EM-2000-292	Direct	Load Research
ER-2001-299	Direct	Weather Normalization of Class Sales; Normalization of Net System
EM-2000-369	Direct	Load Research
ER-2001-672	Direct & Rebuttal	Weather Normalization of Class Sales; Normalization of Net System
ER-2002-1	Direct & Rebuttal	Weather Normalization of Class Sales; Normalization of Net System
ER-2002-424	Direct	Derivation of Normal Weather
EF-2003-465	Rebuttal	Resource Planning
ER-2004-0570	Direct	Reliability Indices
ER-2004-0570	Rebuttal & Surrebuttal	Energy Efficiency Programs and Wind Research Program
EO-2005-0263	Spontaneous	DSM Programs; Integrated Resource Planning
EO-2005-0329	Spontaneous	DSM Programs; Integrated Resource Planning
ER-2005-0436	Direct	Resource Planning
ER-2005-0436	Rebuttal	Low-Income Weatherization; Energy Efficiency Programs
ER-2005-0436	Surrebuttal	Low-Income Weatherization; Energy Efficiency Programs; Resource Planning
EA-2006-0309	Rebuttal, Surrebuttal	Resource Planning
EA-2006-0314	Rebuttal	Jurisdictional Allocation Factor
ER-2006-0315	Supplemental Direct	Energy Forecast
ER-2006-0315	Rebuttal	DSM; Low-Income Programs

ER-2007-0002	Direct	DSM Cost Recovery
GR-2007-0003	Direct	DSM Cost Recovery
ER-2007-0004	Direct	Resource Planning
ER-2008-0093	Rebuttal	Fuel Adjustment Clause, Low-Income Program
ER-2008-0318	Surrebuttal	Fuel Adjustment Clause
ER-2009-0090	Surrebuttal	Capacity Requirements
ER-2010-0036	Supplemental Direct, Surrebuttal	Fuel Adjustment Clause
EO-2010-0255	Direct/Rebuttal	Fuel Adjustment Clause Prudence
ER-2010-0356	Rebuttal, Surrebuttal	Resource Planning Issues
ER-2011-0028	Rebuttal, Surrebuttal	Fuel Adjustment Clause
EU-2011-0027	Rebuttal	Fuel Adjustment Clause
EO-2011-0390	Rebuttal Rebuttal	Resource Planning; Fuel Adjustment Clause Prudence
EO-2012-0074	Direct/Rebuttal	Fuel Adjustment Clause Prudence
ER-2012-0166	Rebuttal/Surrebuttal	Fuel Adjustment Clause