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Witness: Michael S. Scheperle
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MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

MICHAEL S. SCHEPERLE

**NORANDA ALUMINUM, INC. et al.,
COMPLAINANTS,**

vs.

**UNION ELECTRIC COMPANY dba AMEREN MISSOURI
RESPONDENT**

CASE NO. EC-2014-0224

Jefferson City, Missouri
May 2014

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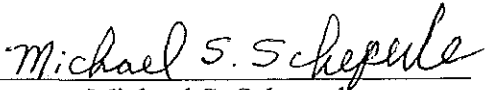
**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

Noranda Aluminum, Inc., et al,)	
)	
Complainants,)	
)	
v.)	Case No. EC-2014-0224
)	
Union Electric Company, d/b/a)	
Ameren Missouri)	
)	
Respondent.)	

AFFIDAVIT OF MICHAEL S. SCHEPERLE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Michael S. Scheperle, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 17 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.



Michael S. Scheperle

Subscribed and sworn to before me this 7th day of May, 2014.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086



Notary Public

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vs.

UNION ELECTRIC COMPANY dba AMEREN MISSOURI, Respondent

CASE NO. EC-2014-0224

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1 **REBUTTAL TESTIMONY**

2 **OF**

3 **MICHAEL S. SCHEPERLE**

4 **Noranda Aluminum, Inc. et.al., Complainant**

5 **vs.**

6 **Union Electric Company dba Ameren Missouri, Respondent**

7 **CASE NO. EC-2014-0224**

8 Q. Please state your name and business address.

9 A. My name is Michael S. Schepeler and my business address is Missouri Public
10 Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

11 Q. Who is your employer and what is your present position?

12 A. I am employed by the Missouri Public Service Commission ("Commission")
13 and my title is Manager, Economic Analysis Section, Energy Unit, Regulatory Review
14 Division.

15 **CREDENTIALS**

16 Q. What is your educational background and work experience?

17 A. I completed a Bachelor of Science degree in Mathematics at Lincoln
18 University in Jefferson City, Missouri. I have been employed by the Commission since June
19 2000. Prior to joining the Commission, I was employed at United Water Company as a
20 Commercial Manager from 1983 to 2000, and at Missouri Power & Light Company from
21 1973 to 1983 as a Customer Service Representative and as a Supervisor of Rates, Regulations
22 and Budgeting. A list of the cases in which I have filed testimony/reports before the
23 Commission is shown on Schedule MSS-R1. I moved to the Economic Analysis section as a
24 Regulatory Economist III in 2008. I assumed my current position in 2009. My duties consist

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1 of directing Commission Staff within the Economic Analysis section, analyzing rate case
2 activity, reviewing tariffs, and making recommendations based upon my evaluations and the
3 evaluations performed by the Economic Analysis section. My previous testimony and
4 responsibilities address topics including class cost of service, rate design, telecommunication
5 issues, complaint cases, Missouri Universal Service Fund, energy efficiency/demand-side
6 management, a Staff member of the Missouri Deaf Relay Committee, and a member of the
7 Commission Staff's Electric Meter Variance Committee.

8 Q. With reference to Case No. EC-2014-0224, have you participated in the
9 Commission Staff's ("Staff") review of Noranda Aluminum, Inc., and thirty-seven other
10 electric customers ("Noranda") complaint against Union Electric Company dba Ameren
11 Missouri ("Ameren Missouri") concerning its complaint case on rate design?

12 A. Yes. On April 16, 2014, the Commission directed Staff to perform an analysis
13 and investigation, the parameters of which will be more fully defined by the Commission as
14 the case progresses.¹ The Commission further noted that it expects Staff to comply with the
15 procedural schedule. Staff takes this opportunity to offer its analysis and investigation. Also,
16 Staff responds to the Direct Testimony of Mr. Maurice Brubaker on behalf of Noranda.

17 Q. What topics are you addressing?

18 A. The testimony topics I am addressing are as follows:

- 19 • Overview of Noranda's rate design proposal;
- 20 • The background of the Large Transmission Service ("LTS") rate schedule;
- 21 • Dollar and percent increases to customer classes from Ameren Missouri's last
22 general rate proceeding, Case No. ER-2012-0166;
- 23 • The current rate design of the LTS rate schedule;
- 24 • The results of Staff's class cost of service ("CCOS") study in Ameren
25 Missouri's last general rate proceeding, Case No. ER-2012-0166;

¹ Commission "Order Establishing Procedural Schedule."

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- 1 • Noranda’s proposed rate design for the Aluminum Smelter rate schedule;
2 • Noranda’s proposed terms and conditions for the Aluminum Smelter rate
3 schedule; and
4 • Noranda’s proposal to adjust certain other Ameren Missouri rate schedules to
5 make its proposal revenue-neutral to Ameren Missouri.

6 Q. Is this the entire filing being made by Staff for this case?

7 A. No. In her rebuttal testimony, Staff witness Sarah Kliethermes will address the
8 1) identification of the out-of-pocket cost to Ameren Missouri to provide service to Noranda
9 on a per MW basis and on an annual basis, and 2) identification of the per-kWh rate for
10 Noranda that would equalize the impact on existing customers of serving Noranda versus
11 customer impact if Noranda left the system.

12 **EXECUTIVE SUMMARY**

13 Q. Does Staff support Noranda’s request?

14 A. Not at this time.² This is Noranda’s complaint to prove. However, Staff
15 realizes that the Commission’s decision may affect over one million monthly electric
16 customer bills; thus, Staff presents facts and analysis to the Commission for its decision.
17 Additionally, Ameren Missouri has given its sixty (60) day notice of filing a general rate
18 case.³ Ameren Missouri has reiterated its commitment⁴ to filing that case on or before
19 July 15, 2014.

20 Q. What are Staff’s recommendations?

21 A. Staff recommends the following:

- 22 1. That the Commission conduct local public hearings.
23 2. That Noranda still pay Fuel and Purchased Power Adjustment Clause (“FAC”) ~~and~~
24 rider payments. Noranda’s proposal removes FAC payments for Noranda.

² Staff supports Noranda remaining a viable retail customer of Ameren Missouri.

³ Sixty-day notice filed March 21, 2014 and assigned Case No. ER-2014-0258.

⁴ “Ameren Missouri’s Response to Order Inviting Responses to Agenda Discussion” filed April 10, 2014 page 2, paragraph 1 (EFIS # 83).

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- 1 3. That the Commission not approve the provision (terms and conditions) of a
2 ten- (10-) year contract that Noranda seeks which limits future increases to a
3 2% limit provision. Noranda should present evidence in each general rate
4 proceeding for Commission consideration.
5 4. That the Commission not approve the proposed energy charge rate of
6 \$0.03/kWh or \$30.00/MWh (refer to Rebuttal Testimony of Staff witness
7 Sarah Kliethermes). Ms. Kliethermes' rebuttal testimony determined that
8 Ameren Missouri's variable cost of providing service to Noranda is over
9 \$30.00, and any reasonable discounted rate approved for Noranda must be
10 greater than Ameren Missouri's variable cost and subject to the conditions
11 described above for FAC payments and 2% limit provision.
12 5. That if the Commission approves Noranda's proposal for revenue-neutral
13 calculations, that Noranda change its class calculations as proposed by Staff.
14 Noranda's proposal does not consider the three components of the rate design
15 of Pre-MEEIA, MEEIA⁵ and Retail rate revenues as outlined in the Revised
16 Non-Unanimous Stipulation and Agreement in Case No. ER-2012-0166.
17 6. Staff recommends that if the Commission approves revenue-neutral
18 adjustments, the lighting class (rate schedules 5(M), 6(M) and 7(M)) and the
19 Metropolitan St. Louis Sewer District ("MSD") be included in the rate
20 adjustments. Noranda's proposal excludes the lighting class and MSD in its
21 revenue-neutral adjustments.

22 **Overview of Noranda Aluminum Inc., et al Complaint Filing**

23 Q. What is your understanding of the Complaint case filed by Noranda?

24 A. On February 12, 2014, Noranda filed a complaint⁶ with the Commission
25 against Ameren Missouri, asking that Ameren Missouri be required to create a new rate
26 service classification for Aluminum Smelters⁷ which would reduce rates for Noranda.
27 Additionally, thirty-seven individual complainants⁸ joined in this complaint. The complaint
28 concerns the rate Ameren Missouri currently charges Noranda for the electricity and electrical
29 service that Ameren Missouri sells to Noranda. Noranda's complaint asserts that the current
30 rate is now unreasonable. The current electric rate to Noranda averages \$37.94/MWh plus the

⁵ Missouri Energy Efficiency Investment Act ("MEEIA").

⁶ Also, on February 12, 2014, Noranda Aluminum, Inc. and 37 other individual customers of Ameren Missouri filed a complaint with the Missouri Public Service Commission against Ameren Missouri, alleging that Ameren Missouri is earning money at an excessive rate. The complaint asks the Commission to review Ameren Missouri's rates and to revise those rates to just and reasonable levels. The case is designated Case No. EC-2014-0223.

⁷ Noranda proposed rate schedule detailed in Direct Testimony of Maurice Brubaker, Schedule MEB-1, 4 pages.

⁸ Page 1, paragraph 2 of Rate Design Complaint and Request for Expedited Review.

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1 fuel adjustment surcharge (currently \$3.50/MWh), for a total of \$41.44/MWh. The
2 Complainants' request expedited treatment of this complaint.

3 In this complaint, Noranda requests an electric rate of \$30/MWh, which is the rate that
4 Noranda asserts will keep Noranda viable and sustainable.⁹ Noranda states that under its
5 current electric rates, Noranda pays Ameren Missouri approximately \$160 million in base
6 rates, plus charges under the Ameren Missouri fuel adjustment clause, resulting in an effective
7 rate of \$41.44/MWh.¹⁰

8 Q. What is Noranda's proposal?

9 A. Noranda's proposal:

- 10 1. Creates a new tariff rate schedule applicable to Aluminum Smelters under rate
11 classification 10(M);
- 12 2. Leaves current Large Transmission Service rate schedule unchanged;
- 13 3. Would have a new Energy Charge rate of \$0.03 per kWh with no demand and
14 customer charges;
- 15 4. Approves a long-term rate plan of 10 years where increases shall not exceed
16 2% as a result of an Ameren Missouri general rate proceeding;
- 17 5. Maintains new terms and conditions for 10 years;
- 18 6. Adjusts certain other Ameren Missouri rate schedules to make the proposal
19 revenue-neutral to Ameren Missouri;
- 20 7. May adjust residential low-income pilot program provisions whereby Noranda
21 may increase residential low-income payments should the program be
22 modified; and
- 23 8. Removes Noranda from paying or being included in FAC rider provisions.

24
25 Noranda currently takes service under the Service Classification No. 12(M), the Large
26 Transmission Service ("LTS")¹¹ rate. Noranda's proposal creates a new tariff rate schedule
27 for Aluminum Smelters under service rate classification 10(M). Noranda proposes revenue
28 adjustments to other rate classes to demonstrate how rates could be adjusted that are revenue-

⁹ Page 4, paragraph 9 of Rate Design Complaint and Request for Expedited Review.

¹⁰ Page 5, paragraph 13 of Rate Design Complaint and Request for Expedited Review.

¹¹ Noranda is the only customer under the LTS rate schedule.

1 neutral to Ameren Missouri. Noranda's proposal would increase rates in rate schedules
2 served by Ameren Missouri under service classification rate schedules¹² 1(M), 2(M), 3(M),
3 4(M), and 11(M).

4 **Background – Establishment of Large Transmission Service Rate Schedule 12(M)**

5 Q. When did Ameren Missouri initiate the LTS rate schedule?

6 A. The LTS rate schedule became effective June 1, 2005.

7 Q. Please describe the process initiating the LTS rate schedule.

8 A. On December 20, 2004, Ameren Missouri filed its Application for a Certificate
9 of Convenience and Necessity ("CCN") for an expansion of its service area in New Madrid
10 County. This proposed application was assigned Case No. EA-2005-0180. In its Application,
11 AmerenUE¹³ states:

12 The area sought to be certificated by AmerenUE encompasses the aluminum smelting
13 plant facility owned by Noranda Aluminum, Inc. ("Noranda"). Noranda's current
14 electric supply arrangements expire May 31, 2005. Noranda has requested that
15 AmerenUE supply it with electrical service to meet Noranda's electric power and
16 energy needs for a minimum term of fifteen (15) years commencing June 1, 2005.
17 AmerenUE does not hold a certificate of public convenience and necessity for the area
18 encompassing Noranda's premises. Therefore, it is necessary for AmerenUE to obtain
19 a certificate of public convenience and necessity for this area.

20 On February 24, 2005, the parties in the case filed a Unanimous Stipulation and
21 Agreement resolving all issues. The parties agreed that the Application should be approved
22 and AmerenUE should be granted a Certificate of Convenience and Necessity to serve
23 Noranda. The agreement provided that Noranda will be served on an interim basis as a
24 Missouri retail customer of AmerenUE pursuant to the proposed Large Transmission Service

¹² Rate schedules for Residential 1(M), Small General Service 2(M), Large General Service 3(M), Small Primary Service 4(M), and Large Primary Service 11(M).

¹³ In 2005, known as Union Electric Company dba AmerenUE, now known as Union Electric Company dba Ameren Missouri.

1 tariff. That tariff, and the terms under which service was provided to Noranda, were subject to
2 review in AmerenUE's next general rate case, complaint case, or rate design case. The parties
3 also agreed that service to Noranda would be treated for ratemaking purposes and for
4 determination of prudence like service to any other Missouri retail customer of AmerenUE.

5 The Commission, in its "Order Approving Stipulation Agreement,"¹⁴ noted that it was
6 of the opinion that the requested extension of AmerenUE's service area was necessary and
7 convenient for the public service and should be granted. The Commission further found that
8 the proposed LTS tariff should be approved, on an interim basis, for service rendered on and
9 after June 1, 2005, but only until such time as the Commission issued its final order in the
10 next case to consider AmerenUE's rates, whether initiated by tariff filing or by complaint.

11 Q. Please describe the rate structure of the LTS rate schedule initiated in 2005.

12 A. The June 1, 2005, LTS rate schedule consisted of the following elements:

- 13 • Large Transmission Service rates
- 14 • Optional Time of day rates
- 15 • Customer Charge – per month per season¹⁵
- 16 • Energy charge – per kWh per season
- 17 • Demand Charge – per kW of billing demand per season
- 18 • Reactive Charge – per kVar per season

19
20 Q. Please describe the terms and conditions of the LTS rate schedule initiated in
21 2005?

22 A. The June 1, 2005, LTS rate schedule terms and conditions included:

- 23 • Contract Term: A Customer taking service under this rate shall agree to an
24 initial Contract Term of 15 years. The Contract Term shall be extended in one-
25 year increments unless or until the contract is terminated at the end of the
26 Contract Term or any annual extension thereof by a written notice of

¹⁴ Order effective March 20, 2005.

¹⁵ Summer season is applicable during four (4) monthly billing periods of June through September. Winter season is applicable during eight (8) monthly billing periods of October through May.

1 termination given by either party or received not later than five years prior to
2 the date of termination.

- 3 • Rate Application: This rate shall be applicable, at Customer's request, to any
4 Customer that 1) meets the Rate Application conditions of the Large Primary
5 Service rate, 2) can demonstrate to Company's satisfaction that such energy
6 was routinely consumed at a load factor of 95% or higher or that customer will,
7 in the ordinary course of its operations, operate at a similar load factor, 3) if
8 necessary, arranges and pays for transmission service for the delivery of
9 electricity over the transmission facilities of a third party, 4) does not require
10 use of Company's distribution system or distribution arrangements that are
11 provided by Company at Company's cost, excepting Company's metering
12 equipment, for service to Customer, and 5) meets all other required terms and
13 conditions of the rate.
- 14 • Annual Contribution Factor (ACF): Customer shall pay an ACF to Company,
15 calculated as follows: The ACF shall be calculated as of the date of the
16 completion of each successive 12-month billing period, commencing with the
17 first annual anniversary date of service to Customer under the rate. In the event
18 the ACF is eliminated or discontinued prior to the said anniversary date, no
19 customer payment is required. The ACF shall be calculated so as to provide
20 Company an annual net bundled kilowatt-hour realization to Company of not
21 less than \$0.0325/kWh, after appropriate Rider C adjustments to Customer's
22 monthly kilowatt-hour and kilowatt meter readings. All energy and
23 compensation due as a result of the Energy Line Loss and Reactive Charge
24 provisions herein, if any, shall be excluded in the calculation of the ACF.
25

26 **Ameren Missouri Last General Rate Proceeding**

27 Q. Please describe the overall increase granted Ameren Missouri in Case No. ER-
28 2012-0166.

29 A. On December 12, 2012, the Commission issued its Report and Order in Case
30 No. ER-2012-0166, the Ameren Missouri electric case. The Report and Order approved an
31 increase in Ameren Missouri's overall Missouri jurisdictional gross annual electric revenues
32 of \$259.6 million. The new rates became effective on January 2, 2013.

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1 Q. Please describe the Commission-approved Revised Non-Unanimous
2 Stipulation and Agreement (“Revised Agreement”) in Case No. ER-2012-0166 for rate
3 design.

4 A. On October 18, 2012, the Commission approved the Revised Agreement filed
5 on October 10, 2012, as a resolution of the issues addressed¹⁶ therein. The Revised
6 Agreement established a three-step process for the allocation of any ordered revenue increase
7 among the customer classes. It also imposed requirements to ensure that Ameren Missouri’s
8 rate schedules are uniform for certain interrelationships among the non-residential rate
9 schedules. The Commission independently found and concluded that the Revised Agreement
10 was a reasonable resolution of the issues addressed and should be approved. Staff was one of
11 the signatories to the Revised Agreement.

12 Another signatory to the Revised Agreement regarding rate design issues was the
13 Missouri Industrial Energy Consumers (“MIEC”)¹⁷ of which Noranda was a member in Case
14 No. ER-2012-0166. Ameren Missouri’s overall rate increase to consumers was 10.05% with
15 the LTS/Noranda increase being 6.60%. The new rates became effective January 2, 2013.
16 Fourteen months later (February 12, 2014), Noranda and 37 other individuals filed this
17 complaint case on rate design alleging that the current rates are no longer just and reasonable.

18 Q. Please describe each class of service percentage increase?

19 A. Schedule MSS-R2 details each class increase from Case No. ER-2012-0166.
20 The overall increase granted Ameren Missouri was 10.05% or approximately \$259.6 million.
21 The residential class received an increase of 10.85% and the small general service class

¹⁶ The Commission approved the Revised Stipulation that resolved most of the rate design issues. Two issues remained 1) the customer charge for residential and small general service and 2) how to address the residential declining block rate design.

¹⁷ Missouri Industrial Energy Consumers represented sixteen large customers including Noranda Aluminum.

1 received an increase of 8.76%. The Revised Stipulation detailed the three-step process of a
2 revenue-neutral adjustment, a Pre-MEEIA allocation, and a MEEIA¹⁸ allocation. The Pre-
3 MEEIA and MEEIA allocation per class varied based on opt-out provisions for certain
4 customers. This is the basic reason that Noranda received a below average increase – Noranda
5 has opted-out of Pre-MEEIA and MEEIA costs.

6 **Current Rate Design of Large Transmission Service 12(M)**

7 Q. What is Noranda's current service classification and rate schedule?

8 A. Noranda currently takes service under the Service Classification No. 12(M),
9 the LTS rate schedule. Noranda is the only customer under the LTS rate schedule.

10 Q. Please describe LTS rate schedule 12(M).

11 A. The LTS rate schedule 12(M) consists of the following elements:

- 12 • LTS Rates
- 13 • Optional Time of day rates
- 14 • Customer Charge – per month per season¹⁹
- 15 • Low-Income Pilot Program Charge – per month per season
- 16 • Energy Charge – per kWh per season
- 17 • Demand Charge – per kW of billing demand per season
- 18 • Reactive Charge²⁰ – per kVar per season
- 19 • Energy Line Loss Rate – per applicable kWh
- 20 • Fuel and Purchased Power Adjustment – per kWh
- 21 • Energy Efficiency Charge – per kWh²¹

22
23 **Results of Staff's CCOS Study in Ameren Missouri's Last General Rate Proceeding**

24 Q. Please provide an overview of Staff's Class-Cost-of-Service ("CCOS") study
25 in Case No. ER-2012-0166?

¹⁸ Missouri Energy Efficiency Investment Act ("MEEIA") adopted by the legislature in 2009.

¹⁹ Summer season is applicable during four (4) monthly billing periods of June through September. Winter season is applicable during eight (8) monthly billing periods of October through May.

²⁰ Not applicable to Noranda

²¹ Noranda has opted-out of energy efficiency charges applicable to Missouri Energy Efficiency Investment Act (MEEIA).

1 A. Listed below are the summary results of Staff's CCOS study in Case No. ER-
2 2012-0166. Staff realizes that the CCOS is somewhat dated²² but the new rates from that case
3 became effective January 2, 2013.

4 TABLE 1

Summary Results of Staff's CCOS Study ²³

Customer Class	Revenue Neutral % Increase
Residential (RES)	6.81%
Small General Service (SGS)	-4.20%
Large General Service/Small Primary Service (LGS/SPS)	-7.28%
Large Primary Service (LPS)	-5.73%
Large Transmission Service (LTS)	-4.43%
Lighting	10.67%
Total	0.00%

5
6 Table 1 shows the changes necessary on a revenue-neutral basis of each customer
7 class required to exactly match that customer class' rate revenues with Ameren Missouri's
8 cost to serve that class based on Staff's CCOS study in Case No. ER-2012-0166. The results
9 are presented on a revenue-neutral basis, as a percent shift, (expressed as negative or positive
10 percent) that is required to equalize the utility's rate of return from each class. Staff realizes
11 that other parties in that case presented CCOS studies that may vary from Staff's results;
12 however, parties in Case No. ER-2012-0166 agreed or did not oppose the Revised Non-
13 Unanimous Stipulation and Agreement for rate design.

²² Staff's revenue requirement as presented in its Accounting Schedules includes expected changes for a true-up ending July 31, 2012, based on current information.

²³ Staff's Rate Design and CCOS Report, Table 2, EFIS # 97, Case No. ER-2012-0166.

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1 “Revenue neutral” means that the revenue shifts among classes do not change the
2 utility’s total system revenues. Revenue neutral adjustments actually occurred in the Revised
3 Agreement for rate design. The revenue neutral format aids in comparing revenue
4 deficiencies between customer classes and makes it easier to discuss revenue neutral shifts
5 between classes, if appropriate. Staff calculated the revenue neutral percent increase to a
6 class’ rate revenues by subtracting the overall system average increase recommended by Staff
7 from each customer class’ required-percentage increase to rate revenue to match the revenues
8 Ameren Missouri should receive from that class to match Ameren Missouri’s cost to serve
9 that class.

10 Q. Please explain Table 1.

11 A. Based on Table 1, on a revenue-neutral basis, the residential customer class
12 was providing 6.81% less revenue to Ameren Missouri than Ameren Missouri’s cost to serve
13 that class. The Large General Service/Small Primary Service customer class was providing
14 7.28% more revenue to Ameren Missouri than Ameren Missouri’s cost to serve that class.

15 Because a CCOS study is not precise, it should be used only as a guide for designing
16 rates. In addition, bill impacts need to be considered. While reducing over-collection from
17 customer classes with negative revenue shift percentages (revenues greater than cost to serve)
18 for Ameren Missouri customer classes on the SGS, LGS/SPS, LPS, and LTS rate schedules
19 all the way to zero is appealing, the bill impact on the customer classes with positive revenue
20 shift percentages must be considered. For Ameren Missouri, these are the RES and Lighting
21 rate classes. Staff’s recommendations for shifts in the class-revenue requirements are based
22 on its CCOS study results, Staff’s review of Ameren Missouri’s revenue-neutral adjustments
23 in previous general rate increases (ER-2011-0028 and ER-2010-0036), and Staff’s judgment

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1 regarding the impact of revenue shifts for all classes. The RES rate class received a positive
2 2% revenue-neutral adjustment in Case No. ER-2011-0028 and a positive 1.5% revenue-
3 neutral adjustment in Case No. ER-2010-0036. The Lighting class received a positive 4%
4 revenue-neutral adjustment in Case No. ER-2011-0028, and received no increase (revenue-
5 neutral or rate increase) in Case No. ER-2010-0036, as the Report and Order exempted the
6 lighting class from the rate increase because no specific cost study addressed the lighting
7 rates. The Commission decision noted that the deficiency should be corrected by the
8 completion of a CCOS study for the development of lighting rates in Ameren Missouri's next
9 rate case (which was Case No. ER-2011-0028). Staff's CCOS study indicates that a positive
10 revenue-neutral adjustment of 10.67% would be warranted for the Lighting class (Table 1) in
11 a general rate case.

12 Q. How does Staff's last CCOS study in Case No. ER-2012-0166 relate to
13 Noranda's proposal and Staff's analysis?

14 A. Staff's analysis:

- 15 • First, based on Staff's CCOS study, the LTS rate class was overpaying by
16 4.43%. Noranda is the only customer in the LTS rate class.
- 17 • Second, the Revised Agreement on rate design outlines revenue-neutral
18 adjustments for three rate schedules²⁴ to bring rates closer to their cost to
19 serve.
- 20 • Third, the Revised Agreement on rate design signatories included Staff,
21 Missouri Industrial Energy Consumers ("MIEC"), Missouri Retailers
22 Association ("MRA"), and the Midwest Energy Consumer's Group
23 ("MECG"). Furthermore, the Office of Public Counsel ("OPC"), the Unions,
24 AARP / Consumers' Council of Missouri ("CCM"), Ameren Missouri, and
25 Barnes Jewish Hospital did not sign the Revised Agreement but did not oppose
26 it. Staff's analysis is that there was general agreement with respect to the
27 Revised Agreement.

²⁴ The Lighting class received a positive 3.93% revenue-neutral adjustment. The Large General Service rate schedule and the Small Primary Service rate schedule received a negative 0.18% reduction. The total revenue-neutral adjustment was zero dollars.

- 1 • Fourth, Noranda was a company represented by MIEC, who signed the
- 2 Revised Agreement.
- 3 • Fifth, fourteen months later (rates effective January 2, 2013, complaint filed
- 4 February 12, 2014), Noranda filed a complaint that rates are now not just and
- 5 reasonable for Noranda.
- 6 • Sixth, if Staff would propose a revenue-neutral adjustment today, the Lighting
- 7 class and MSD would be included. Noranda's proposal does not include the
- 8 Lighting class or MSD.

9 **Noranda's Proposed Rate Design and Terms and Conditions**

10 Q. What has Noranda proposed for its new tariff rate schedule?

11 A. Noranda proposes that Ameren Missouri create a new tariff rate schedule
12 applicable to Aluminum Smelters under rate classification 10(M) with new rates and new
13 terms and conditions.

14 Q. What new rates are Noranda proposing?

15 A. The proposed 10(M) rate schedule would consist of the following elements:

- 16 • Aluminum Smelter Service Rates
- 17 • Energy Charge – per kWh
- 18 • Low-Income Program Charge – per month

19 Q. What new terms and Conditions are Noranda Proposing?

20 A. Additional New Terms and Conditions:

- 21 • The Energy Charge rate is subject to increases only when the rates of other
- 22 customers change as a result of a general rate proceeding, but the increase in
- 23 any general rate proceeding shall not exceed 2% of the then-effective energy
- 24 charge.
- 25 • Should Ameren Missouri modify its low-income pilot program, Noranda may
- 26 pay a monthly charge not-to-exceed \$1,500 (current charge) per month plus
- 27 100 times the monthly low-income program charge paid by a residential
- 28 customer consuming 1,500 kWh of energy per month.
- 29 • No other charges, or changes in charges, shall be applied to this rate for a
- 30 period of ten (10) years from the initial date of service.

- 1 • The Contract Term shall be extended in one-year increments unless or until the
2 contract is terminated at the end of the Contract Term or any annual extension
3 thereof by a written notice of termination given by customer and received not
4 later than two years prior to the date of termination.

5 **Noranda's Revenue-Neutral Proposal**

6 Q. Would you explain your understanding of Noranda's revenue-neutral
7 proposal?

8 A. Yes. Mr. Maurice Brubaker, in Direct Testimony, outlines Noranda's
9 proposal. Mr. Brubaker calculated the dollar reduction in base rate revenues that would be
10 associated with implementation of Noranda's rate request. Mr. Brubaker's proposal is
11 summarized on his Schedule MEB-2 whereby Noranda's average retail rate that Noranda pays
12 to Ameren Missouri averages \$.03794 per kWh and that Noranda's revenue-neutral
13 adjustment amount would be approximately \$33.1 million dollars based on Noranda's test
14 year kWh.

15 Q. Would you explain your understanding of Mr. Brubaker's Schedule MEB-3?

16 A. Yes. Noranda proposes revenue-neutral adjustments to base rates of other
17 major customer classes²⁵ detailing the \$33.1 million dollar adjustment. The percent
18 adjustment averages 1.2514% ($\$33,100,000 / \$2,645,117,000$). The classes' rates would
19 increase to make Noranda's proposal revenue-neutral for retail rates.

20 Q. Do you agree with Noranda's calculation on the revenue-neutral proposal?

21 A. No. Staff's understanding is that the total revenue requirement in Case No.
22 ER-2012-0166 consisted of three parts. The three parts are referred to as Pre-MEEIA,
23 MEEIA and retail rate revenues. Noranda used the combination of all three rate revenue

²⁵ Noranda proposed adjustments for the residential service, small general service, large general service, small primary service, and large primary service classes.

1 components. Staff recommends that, if the Commission grants Noranda relief, only the retail
2 portion be used in the calculation of the revenue-neutral component and not the Pre-MEEIA
3 and MEEIA portion. Staff's preferred method would slightly alter the revenue-neutral
4 calculation per class as proposed by Noranda.

5 Q. You mentioned that a three-step process was used in the Revised Stipulation.
6 Please explain the three parts of the Revised Stipulation.

7 A. The Revised Stipulation outlined the three-step process as follows:

- 8 1. Step 1 is to increase the current base rate revenue of the Lighting class by
9 \$1.37 million, and to decrease the current base rate revenue of the LGS/SPS
10 class by \$1.37 million.
- 11 2. Step 2 is to determine the amount of revenue increase awarded Ameren
12 Missouri that is not associated with the energy efficiency ("EE") revenue
13 requirement assigned in Step 3, by subtracting the total amount in Step 3 from
14 the total rate increase awarded to Ameren Missouri. This amount will be
15 allocated to customer classes as an equal percent of current base rate revenues
16 after making this adjustment in Step 1.
- 17 3. Step 3 is to assign directly to applicable customer classes the portion of the
18 revenue increase that is attributable to EE programs. These EE revenue
19 requirements consist of the program costs and Net Shared Benefits relating to
20 the Throughput Disincentives that are associated with programs under the
21 Missouri Energy Efficiency Investment Act ("MEEIA"), and the increase in
22 the revenue requirement associated with the amortization of pre-MEEIA
23 program costs. (underline emphasis).

24 Q. Has Staff prepared a schedule detailing the calculation using the steps of the
25 Revised Stipulation as applied to Noranda's proposal in this case?

26 A. Yes. Schedule MSS-R3 details Staff's calculations for only the rate retail
27 portion including Lighting and MSD.

28 Q. Please explain Schedule MSS-R3.

Rebuttal Testimony of
Michael S. Scheperle

1 A. If the Commission grants Noranda relief and makes a revenue-neutral
2 adjustment²⁶, Schedule MSS-R3 is Staff's calculation detailing the revenue-neutral
3 adjustment for the retail portion including the lighting class and MSD.

4 Column 3 shows the test year base rate retail revenues of each class and column 4
5 shows the adjustment. The adjustment is developed by multiplying the test year base retail
6 rate revenue to recover the \$33.1 million base rate revenue decrease associated with
7 Noranda's request.

8 Q. Does this conclude your rebuttal testimony?

9 A. Yes, it does.

²⁶ Staff is not advocating for a revenue-neutral adjustment, but a different calculation means of allocating a revenue-neutral adjustment based on Commission's decision.

Michael S. Scheperle

**Testimony/Reports Filed Before
The Missouri Public Service Commission:**

CASE NOS:

TO-98-329, *In the Matter of an Investigation into Various Issues Related to the Missouri Universal Service Fund*

TT-2000-527/513, *Application of Allegiance Telecom of Missouri, Inc. ... for an Order Requiring Southwestern Bell Telephone Company to File a Collocation Tariff; Joint Petition of Birch Telecom of Missouri, Inc. for a Generic Proceeding to Establish a Southwestern Bell Telephone Company Collocation Tariff before the Missouri Public Service Commission*

TT-2001-139, *In the Matter of Mark Twain Rural Telephone Company's Proposed Tariff to Introduce its Wireless Termination Service*

TT-2001-298, *In the Matter of Southwestern Bell Telephone Company's Proposed Tariff PSC Mo. No. 42 Local Access Service Tariff, Regarding Physical and Virtual Collocation*

TT-2001-440, *In the Matter of the determination of Prices, Terms, and Conditions of Line-Splitting and Line-Sharing*

TO-2001-455, *In the Matter of the Application of AT&T Communications of the Southwest, Inc., TCG St. Louis, Inc., and TCG Kansas City, Inc., for Compulsory Arbitration of Unresolved Issues with Southwestern Bell Telephone Company Pursuant to Section 252(b) of the Telecommunications Act of 1996*

TC-2002-57, *In the Matter Of Northeast Missouri Rural Telephone Company's And Modern Telecommunications Company's Complaint Against Southwestern Bell Telephone Company Regarding Uncompensated Traffic Delivered by Southwestern Bell Telephone Company To Northeast Missouri Rural Telephone And Modern Telecommunications Company.*

TC-2002-190, *In the Matter Of Mid-Missouri Telephone Company vs. Southwestern Bell Telephone Company*

TC-2002-1077, *BPS Telephone Company, et al., vs. Voicestream Wireless Corporation, Western Wireless Corp., and Southwestern Bell Telephone Company*

TO-2005-0144, *In the Matter of a Request for the Modification of the Kansas City Metropolitan Calling Area Plan to Make the Greenwood Exchange Part of the Mandatory MCA Tier 2*

TO-2006-0360, *In the Matter of the Application of NuVox Communications of Missouri, Inc. for an Investigation into the Wire Centers that AT&T Missouri Asserts are Non-Impaired Under the TRRO*

IO-2007-0439, *In the Matter of Spectra Communications Group, LLC d/b/a CenturyTel's Request for Competitive Classification Pursuant to section 392.245.5 RSMo*

IO-2007-0440, *In the Matter of CenturyTel of Missouri, LLC's Request for Competitive Classification Pursuant to Section 392.245.5 RSMo*

TO-2009-0042, *In the Matter of the Review of the Deaf Relay Service and Equipment Distribution Fund Surcharge*

ER-2009-0090, *In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service*

ER-2009-0089, *In the Matter of the Application of Kansas City Power and Light Company for Approval to Make Certain Changes in its Charges for Electric Service To Continue the Implementation of Its Regulatory Plan*

ER-2010-0036, *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*

ER-2010-0130, *In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company*

ER-2010-0355, *In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric service to Continue the Implementation of Its Regulatory Plan*

ER-2010-0356, *In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service*

ER-2011-0028, *In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service*

ER-2011-0004, *In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company*

EC-2011-0383, *Briarcliff Development Company, a Missouri Corporation, Complainant, v. Kansas City Power and Light Company, Respondent*

EO-2012-0141, *In the Matter of the Application of The Cathedral Square Corporation, a Missouri Non-Profit Corporation, for a Variance from Kansas City Power & Light Company's General Rules and Regulations Requiring Individual Metering*

EO-2012-0009, *In the Matter of KCP&L Greater Missouri Operations Company's Application for Approval of Demand-Side Programs and for Authority to Establish a Demand-side Programs Investment Mechanism*

EO-2012-0142, *In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to Implement Regulatory changes in Furtherance of Energy Efficiency as Allowed by MEEIA*

ER-2012-0166, *In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service*

ER-2012-0174, *In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service*

ER-2012-0175, *In the Matter of the Application of KCP&L Greater Missouri Operations Company for Approval to Make Certain Changes in its Charges for Electric Service*

ER-2012-0345, *In the Matter of The Empire District Electric Company of Joplin, Missouri Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company*

EO-2014-0075, *Ameren Missouri's Request for Waivers for its Missouri Energy Efficiency Investment Act Programs*

HT-2013-0456, *In the matter of KCP&L Greater Missouri Operations Company for Authority to File Tariffs Changing the Steam QCA for Service Provided to Customers in its Service Territory*

HR-2014-0066, *In the Matter of Veolia Energy Kansas City, Inc. for Authority to File Tariffs to Increase Rates*

Missouri Public Service Commission
Case No. EC-2014-0224

Customer Class	Case No. ER-2012-0166 % Increase
Residential	10.85%
Small General Service	8.76%
Large General Service	9.85%
Small Primary Service	10.54%
Large Primary Service	9.78%
Large Transmission Service	6.60%
Lighting	10.79%
MSD	6.60%
Total	10.05%

Missouri Public Service Commission
Case No. EC-2014-0224

(1) Line	(2) Class	(3) Retail Revenue Requirement	(4) Staff Revenue Neutral Adjustment
1	RES	\$ 1,242,406,832	\$ 15,922,614
2	SGS	\$ 309,885,557	\$ 3,971,475
3	LGS	\$ 572,217,635	\$ 7,333,508
4	SPS	\$ 219,049,323	\$ 2,807,324
5	LPS	\$ 200,484,019	\$ 2,569,392
6	LTS	\$ 158,163,699	\$ (33,100,000)
7	Lighting	\$ 38,604,323	\$ 494,751
8	MSD	\$ 73,024	\$ 936
9	Total	\$ 2,740,884,412	\$ (0)

1.28159%