Exhibit No.:

Issues: AAO – Lost Fixed Cost

Calculation

Witness: Steven M. Wills

Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony

Case No.: EU-2012-0027

Date Testimony Prepared: October 21, 2011

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EU-2012-0027

DIRECT TESTIMONY

OF

STEVEN M. WILLS

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

> St. Louis, Missouri October, 2011

OF STEVEN M. WILLS

CASE NO. EU-2012-0027

1	Q.	Please state your name and business address.
2	A.	Steven M. Wills, Ameren Services Company ("Ameren Services"), One
3	Ameren Plaza	a, 1901 Chouteau Avenue, St. Louis, Missouri.
4	Q.	What is your position with Ameren Services?
5	A.	I am the Managing Supervisor of Quantitative Analytics in the Corporate
6	Planning Dep	partment, which provides various types of support services to the operating
7	companies ov	wned by Ameren Corporation, including Union Electric Company d/b/a
8	Ameren Miss	ouri ("Ameren Missouri" or the "Company").
9	Q.	Please describe your educational background and employment
10	experience.	
11	A.	I received a Bachelor of Music degree from the University of Missouri-
12	Columbia in	1996. I subsequently earned a Master of Music degree from Rice University
13	in 1998, then	a Master of Business Administration ("M.B.A.") degree with an emphasis
14	in Economics	from St. Louis University in 2002. While pursuing my M.B.A., I interned
15	at Ameren Er	nergy in the Pricing and Analysis Group. Following completion of my
16	M.B.A. in Ma	ay 2002, I was hired by Laclede Gas Company as a Senior Analyst in its
17	Financial Ser	vices Department. In this role I assisted the Manager of Financial Services
18	in coordinatin	ng all financial aspects of rate cases, regulatory filings, rating agency
19	studies, and n	numerous other projects.

1 In June 2004, I joined Ameren Services as a Forecasting Specialist. In this role, I 2 developed forecasting models and systems that supported the Ameren operating 3 companies' involvement in the Midwest Independent Transmission System Operator, 4 Inc.'s ("MISO") Day 2 Energy Markets. 5 In November 2005, I moved into the Corporate Analysis Department of Ameren 6 Services, where I was responsible for performing load research activities, electric and gas 7 sales forecasts, and assisting with weather normalization for rate cases. In January 2007, I 8 accepted a role I briefly held with Ameren Energy Marketing Company as an Asset and 9 Trading Optimization Specialist before returning to Ameren Services as a Senior 10 Commercial Transactions Analyst in July 2007. I was subsequently promoted to my 11 present position as the Managing Supervisor of the Quantitative Analytics group, where 12 among other things I supervise many of the same activities mentioned above that I 13 performed upon joining the Corporate Analysis Department. 14 Q. What is the purpose of your testimony in this proceeding? 15 A. The purpose of my testimony is to describe the calculation of the dollar 16 amount requested for the Accounting Authority Order ("AAO") requested in this 17 proceeding. I will provide a means for accurately establishing the amount of fixed costs 18 that went unrecovered specifically due to the substantial reduction in Noranda's load 19 starting in late January 2009 as a result of a devastating ice storm that struck southeast 20 Missouri at that time. A summary of this calculation is attached to my testimony as 21 Schedule SMW-1. Company witness Lynn M. Barnes describes these events in more 22 detail in her direct testimony.

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Q. Please explain your calculation.

- A. The calculation quite simply uses the retail rates applicable to the Noranda
- 3 load multiplied by the volumes¹ that were impacted by the outage to determine the
- 4 forgone fixed cost recovery. I also calculated the portion of the retail rate that is
- 5 attributable to net fuel costs, as 95% of the under-recovery of fuel costs was made up
- 6 through the operation of the fuel-adjustment clause ("FAC") beginning March 1, 2009.
- 7 Finally, I calculated the incremental off-system sales revenue retained by the Company
- 8 pursuant to the 5% sharing in the FAC² that resulted from the utilization of generating
- 9 capacity that had been planned to serve Noranda during the outage period. This revenue
- 10 contributed to the fixed cost recovery otherwise foregone due to the load impairment.
- 11 The result is a clear and accurate picture of the fixed costs that went unrecovered as a
- result of the ice storm and ensuing outage.

O. Please explain how the calculation is laid out in Schedule SMW-1.

- A. Moving from left to right across the page, I show the actual and
- normalized volumes of energy, demand and losses (on AECI's transmission system) and
- calculate the difference as the impact of the outage on Noranda's energy consumption. I
- also show the normalized level of energy at generation including losses on the Ameren

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¹ The outage impact volumes include an energy component, a demand component, and a loss component. The loss component accounts for contractually required energy Ameren Missouri supplies to Associated Electric Cooperative, Inc. ("AECI") to compensate it for losses incurred on its transmission system. Losses are supplied to AECI (and paid for by Noranda) because Ameren Missouri delivers the energy Noranda consumes to a delivery point on AECI's system approximately 40 miles from the Noranda plant, with the energy then being transported to Noranda by AECI pursuant to a separate transmission arrangement between Noranda and AECI. All components are priced according to the Company's Large Transmission Service ("LTS") rate schedule, which applies only to Noranda since Noranda is (and has been since adoption of the LTS rate) the Company's only LTS customer.

² For the period from January 27th through February 28th, prior to the effective date of the implementation of Ameren Missouri's first FAC tariff, 100% of the revenue from power not taken by Noranda was used to offset forgone fixed cost recovery.

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Missouri system for purposes of completing the FAC-related calculations. I then show the applicable rates for each measure (energy/demand/losses) that were in effect at the time the outage was ongoing. From there I calculate the foregone cost recovery (fixed and variable) due to the outage by simply applying the appropriate rates to the load reduction measures. Finally, I perform the FAC-related calculations which account for the variable costs for which accounting authority is not being sought. In the FAC, the Net Base Fuel Cost ("NBFC") rate, as defined in the tariff, is applied to the sales at generation to determine the amount of fuel costs the Company recovered through actual sales in its base rates. Because sales to Noranda were down during this time, fuel cost recovery was also down. The operation of the FAC allows Ameren Missouri to recover 95% of that fuel cost recovery shortfall in future periods, so I show the calculation of that future recovery. Next, I show the incremental amount of off-system sales revenue the Company was able to retain in order to mitigate the lost fixed cost recovery. The final column shows the total lost fixed cost recovery the Company incurred, calculated by taking the total foregone cost recovery column and subtracting the NBFC and off-system sales sharing recoveries.

Q. How were the volumes impacted by the outage determined?

A. Because Noranda has an extremely consistent load, both in terms of total energy consumption and load shape (the pattern of energy consumption across time), I used actual historical load data as a proxy for the load that would have been expected to be present absent the outage. This is the same methodology used by both the Company and the Missouri Public Service Commission Staff ("Staff") to annualize Noranda's load for purposes of removing the impact of the outage from the test year in each of the

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Q.

A.

Yes, it does.

1	Company's recent electric rate cases that included such impacts, Case Nos. ER-2010-								
2	0036 and ER-2011-0028.								
3	Q. How did you determine the dates that the outage started and ended?								
4	A. The start of the outage is quite easy to identify. We are all well aware of								
5	the ice storm as a discreet event that occurred on January 27, 2009. It is easy to see the								
6	Noranda load drop that evening around 10:00 p.m. when reviewing hourly consumption								
7	data. The end of the outage is more difficult to pinpoint precisely. Necessitated by the								
8	nature of the recovery work, Noranda's load came back in very small, incremental steps								
9	over a period of time exceeding a year. I chose April 9, 2010 as the date that Noranda								
10	returned to full load after careful inspection of the hourly load data. At this point,								
11	Noranda's load clearly sustained its pre-outage level on a consistent basis going forward.								
12	Q. Please summarize your testimony and conclusions.								
13	A. The substantial and sustained drop in Noranda's load due to the ice storm								
14	caused the Company to forgo recovery of \$36.19 million of fixed costs, which I was able								
15	to calculate with a high degree of accuracy given in particular the fact that Noranda is the								
16	only LTS customer and given Noranda's extremely consistent load, both in terms of total								
17	energy consumption and load shape.								

Does this conclude your direct testimony?

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for the Issuance of an Accounting Authority Order Relating to its Electrical Operations.)) Case No. EU-2012-0027)
AFFIDAVIT	OF STEVEN M. WILLS
STATE OF MISSOURI)) ss	
CITY OF ST. LOUIS)	
Steven M. Wills, being first duly sworn on	his oath, states:
1. My name is Steven M. Will	s. I work in the City of St. Louis, Missouri, and I am
employed by Ameren Services Company a	s Managing Supervisor Quantitative Analytics in
Corporate Planning and Analysis.	
2. Attached hereto and made a	part hereof for all purposes is my Direct Testimony
on behalf of Union Electric Company d/b/a	a Ameren Missouri consisting of 5 pages, all of
which have been prepared in written form	for introduction into evidence in the above-referenced
docket.	
3. I hereby swear and affirm the	nat my answers contained in the attached testimony to
the questions therein propounded are true a	and correct.
Subscribed and sworn to before me this <u>2</u>	Stum M. Wills Steven M. Wills A day of October, 2011. Shaude Tesdell Notary Public

Amanda Tesdall - Notary Public Notary Seal, State of Missouri - St. Charles County Commission #11158967 My Commission Expires 9/5/2015 Noranda Outage start: Jan 27, 2009 at 2200 hours Noranda Back to Full Load : April 9, 2010 at 2400 hours

			Rate order effective	Actual energy (At meter	Actual Demand (At meter,	Actual Supplied Losses (AECI	Normalized Energy (At	Normalized Demand (At	Normalized Supplied Losses (AECI	Load Reduction	Load Reduction	Losses not Supplied due to Load Reduction	Load Reduction (MWh) @ Generation for	Demand	Energy charge		Aggregate (Fixed and Variable**) Lost Cost Recovery due to Load		NBFC %		Off system sales	Lost Fixed Cost Recovery due to Load
Season	Year	Month	date	MWh)***	MW)	MWh)	meter, MWh)	meter, MW)	MWh)	(MWh)	(MW)	(MWh)	NBFC	charge per kW	per kWh	Loss Charge	Reduction	NBFC Rate	Sharing	NBFC	sharing	Reduction
Winter	2009	1	23-Jul-07	12,212	475	427	46,308	475	1,621	34,096	-	1,193	34,598	\$ 4.58	\$ 0.0201	\$ 0.0308	\$ 721,070	\$ -	0% \$	-	\$ 1,205,447	\$ (484,377)
Winter	2009	2	23-Jul-07	90,756	154	3,176	329,066	478	11,517	238,310	323	8,341	241,814	\$ 4.58	\$ 0.0201	\$ 0.0308	\$ 6,520,369	\$ -	0% \$	-	\$ 7,564,168	\$ (1,043,800)
Winter	2009	3	1-Mar-09	125,973	201	4,409	350,351	477	12,262	224,378	277	7,853	227,677	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 6,377,642		95% \$, - ,		
Winter	2009	4	1-Mar-09	155,320	249	5,436	339,276	477	11,875	183,956	228	6,438	186,660	\$ 4.86	\$ 0.0213		\$ 5,234,550		95% \$, -,	\$ 205,921	\$ 3,805,072
Winter	2009	5	1-Mar-09	186,888	260	6,541	349,957	477	12,248	163,069	217	5,707	165,466	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 4,713,497		95% \$, ,	\$ 190,088	\$ 3,438,782
Summer	2009	6	1-Mar-09	188,714	269	6,605	336,879	475	11,791	148,165	206	5,186	150,343	\$ 12.74	\$ 0.0242		\$ 6,380,371		95% \$, -,	\$ 194,613	\$ 4,756,074
Summer	2009	7	1-Mar-09	201,301	283	7,046	348,935	476	12,213	147,634	193	5,167	149,804	\$ 12.74	\$ 0.0242	\$ 0.0327	\$ 6,198,080		95% \$		\$ 170,674	\$ 4,602,845
Summer	2009	8	1-Mar-09	211,232	295	7,393	349,672	476	12,239	138,440	182	4,845	140,475	\$ 12.74	\$ 0.0242	\$ 0.0327	\$ 5,819,491	\$ 0.01001	95% \$	1,335,850	\$ 172,985	\$ 4,310,656
Summer	2009	9	1-Mar-09	211,428	305	7,400	337,795	475	11,823	126,367	171	4,423	128,225	\$ 12.74	\$ 0.0242	\$ 0.0327	\$ 5,372,839	\$ 0.01001	95% \$	1,219,353	\$ 137,952	\$ 4,015,534
Winter	2009	10	1-Mar-09	224,520	310	7,858	348,885	476	12,211	124,365	166	4,353	126,193	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 3,595,344	\$ 0.0069	95% \$	827,197	\$ 159,821	\$ 2,608,326
Winter	2009	11	1-Mar-09	237,856	343	8,325	337,833	475	11,824	99,977	133	3,499	101,447	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 2,888,617	\$ 0.0069	95% \$	664,983	\$ 119,756	\$ 2,103,878
Winter	2009	12	1-Mar-09	268,811	390	9,408	350,338	477	12,262	81,527	86	2,853	82,726	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 2,248,480	\$ 0.0069	95% \$	542,267	\$ 129,198	\$ 1,577,015
Winter	2010	1	1-Mar-09	296,523	410	10,378	351,378	477	12,298	54,855	67	1,920	55,661	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 1,556,308	\$ 0.0069	95% \$	364,859	\$ 112,917	\$ 1,078,533
Winter	2010	2	1-Mar-09	290,430	455	10,165	329,066	478	11,517	38,636	23	1,352	39,204	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 976,782	\$ 0.0069	95% \$	256,980	\$ 51,192	\$ 668,610
Winter	2010	3	1-Mar-09	341,953	472	11,968	350,351	477	12,262	8,398	5	294	8,522	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 213,341	\$ 0.0069	95% \$	55,860	\$ 13,003	\$ 144,479
Winter	2010	4	1-Mar-09		476	3,128	90,406	476	3,164	1,046	-	37	1,061	\$ 4.86	\$ 0.0213	\$ 0.0327	\$ 23,459	\$ 0.0069	95% \$	6,955	\$ 1,305	
Grand Total				3,133,278			4,946,497										\$ 58,840,240		\$	11,929,155	\$ 10,716,395	\$ 36,194,690