		Page 2460
1	STATE OF MISSOURI	
2	PUBLIC SERVICE COMMISSION	
3	TRANSCRIPT OF PROCEEDINGS	
4	Evidentiary Hearing	
5	March 11, 2015	
6	Jefferson City, MO	
7	Volume No. 33	
8		
9		
	In the Matter of Union Electric )	
10	Company, d/b/a Ameren Missouri's ) File No.	
	Tariff To Increase Its Revenues ) ER-2014-0258	
11	For Electric Service )	
12		
13		
14		
15	Morris L. Woodruff, Presiding	
	REGULATORY LAW JUDGE	
16		
	ROBERT S. KENNEY, Chairman	
17	WILLIAM P. KENNEY	
	DANIEL Y. HALL	
18	SCOTT T. RUPP	
	COMMISSIONERS	
19		
20		
21		
22		
23	Reported by:	
	SUZANNE BENOIST, RPR, CCR-MO, CSR-IL	
24	MIDWEST LITIGATION SERVICES	
	711 N. 11th Street	
25	St. Louis, MO 63101	

		Page 2461
1	APPEARANCES:	_
2	III I BIII III O O	
3	FOR UNION ELECTRIC COMPANY	
	MS. WENDY TATRO	
4	MR. MATTHEW TONC	
	1901 Chouteau Avenue	
5	St. Louis, MO 63103	
	(314) 554-2237	
6	tbyrne@ameren.com	
7	MR. JAMES B. LOWERY, Attorney at Law	
	Smith Lewis, LLP	
8	111 South 9th Street, Suite 200	
	P.O. Box 918	
9	Columbia, MO 65205-0918	
	(573) 443-3141	
10	lowery@smithlewis.com	
11	FOR AMEREN ELECTRIC, d/b/a AmerenUE:	
	DIANA VUYLSTEKE, Attorney at Law	
12	KEN MALLIN, Attorney at Law	
	CAROLE ILES, Attorney at Law	
13	Bryan Cave, LLP	
	211 North Broadway, Suite 3600	
14	St. Louis, MO 63102	
	(314)259-2543	
15	brent.roam@bryancave.com	
16	4	
	MR. L. RUSSELL MITTEN	
17	Brydon, Sweargen & England, P.C.	
	312 East Capitol	
18	P.O. Box 456	
	Jefferson City, MO 65102	
19	(573) 635-7166	
	rmitten@brydonlaw.com	
20		
	MR. DANIEL C. NELSON	
21	Armstrong Teasdale, LLP	
	7700 Forsyth Blvd., Suite 1800	
22	St. Louis, MO 63105	
	(314) 621-5070	
23	dnelson@armstrongteasdale.com	
24		
25		

		Page 2462
1	FOR MISSOURI INDUSTRIAL ENERGY USERS and	
2	NORANDA ALUMINUM:	
3	EDWARD F. DOWNEY, Attorney at Law	
	Bryan Cave, LLP	
4	221 Bolivar Street, Suite 101	
	Jefferson City, MO 65101-1575	
5	(573) 556-6622	
	efdowney@bryancave.com	
6	FOR MECG:	
	DAVID WOODSMALL, Attorney at Law	
7	Woodsmall Law Office	
_	807 Winston Court	
8	Jefferson City, MO 65101	
	(573) 797–0005	
9	david.woodsmall@woodsmalllaw.com	
1.0	FOR OFFICE OF PUBLIC COUNSEL:	
10	DUSTIN ALLISON, Public Counsel	
11	P.O. Box 2230	
11	200 Madison Street, Suite 650 Jefferson City, MO 65102-2230	
12	(573)751-4857	
13	(373) 731-4037	
13	FOR PSC STAFF:	
14	MR. KEVIN THOMPSON	
	MS. WHITNEY HAMPTON	
15	MR. ALEXANDER ANTA	
	P.O. Box 360	
16	200 Madison Street	
	Jefferson City, MO 65102	
17	(573) 751-3234	
18		
19	FOR CONSUMER'S COUNCIL OF MISSOURI:	
	MR. JOHN COFFMAN	
20	871 Tuxedo Blvd.	
	St. Louis, MO 63119	
21	(573) 424-6779	
22		
23	FOR WAL-MART STORES EAST & SAM'S EAST, INC.:	
	MR. RICK D. CHAMBERLAIN	
24	Six Northeast 63rd Street, Suite 400	
0.5	Sante Fe North Building	
25	Oklahoma City, Oklahoma 73105	
	(405) 848-1014	

		Page 2463
1		
2	PROCEEDINGS	
3	(Whereupon, the hearing began at 8:24 a.m.)	
4	JUDGE WOODRUFF: Let's come to order.	
5	We're back for another day of the Ameren rate case	
6	hearing, ER-2014-0258, and when we left off	
7	yesterday Mr. Smith was on the stand and we're	
8	about to commence with redirect.	
9	Mr. Smith you can come forward.	
10	MR. MALLIN: Thank you, Your Honor.	
11	The vast majority of the redirect will be under	
12	highly classified or HC. When I reach a point	
13	where I can come off I'll alert Your Honor and the	
14	attorneys present.	
15	JUDGE WOODRUFF: So you want to begin	
16	in HC?	
17	MR. MALLIN: All right. We will	
18	begin In camera.	
19	JUDGE WOODRUFF: Before we get	
20	started we've got some fans here if anyone wants	
21	them out there.	
22	Are we okay back here?	
23	CHAIRMAN KENNEY: I'm okay so far.	
24	JUDGE WOODRUFF: If anybody wants to	
25	plug in a fan feel free.	

		Page 2464
1	MR. MALLIN: I'm going to have marked	
2	the liquidity chart, I believe we're on 532 if I'm	
3	correct and if I'm wrong I apologize, Your Honor.	
4	JUDGE WOODRUFF: That is correct,	
5	532.	
6	MR. MALLIN: Thank you, Your Honor.	
7	This is 532.	
8	(REPORTER'S NOTE: An in-camera session was held,	
9	which is contained in Volume 34, pages 2464-2476 of	
10	the transcript.)	
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

		Page 2465
1		
2	JUDGE WOODRUFF: And we are back in	
3	regular session.	
4	Q. (BY MR. MALLIN) And again Mr. Smith	
5	we're now on page 18 of Exhibit 533, is that true?	
6	A. Yes, it is.	
7	Q. What information is being conveyed	
8	here with respect to the rod mill at the New Madrid	
9	facility as part of Noranda's disclosures with the	
10	SEC?	
11	A. First it indicates that we have	
12	temporarily delayed the rod mill and this is in	
13	response to our ongoing negotiations with Ameren,	
14	and we note that there can be no certainty as to	
15	when we will be able to complete the construction	
16	of the rod mill.	
17	Q. Is there any discussion with regard	
18	to whether, and what may happen if Noranda is	
19	unable to complete the rod mill?	
20	A. Yes, there are.	
21	Q. What is disclosed there?	
22	A. Well, again I could read that as	
23	well. There are a number of items that are listed.	
24	Q. Can you give us a list?	
25	A. Okay. And I'm sorry, could you just	

Page 2466

- 1 repeat the question please?
- 2 Q. Sure, and I apologize, I understand
- you had surgery on your eyes, perhaps that was
- 4 inappropriate for me to have -- let me do this this
- 5 way: In paragraph 2 of this particular paragraph,
- 6 Mr. Smith, does Noranda identify for the public and
- 7 Securities and Exchange Commission what may happen
- 8 if it does not complete the rod mill?
- 9 A. Yes, it does.
- 10 Q. In terms of what penalties may exist
- and things of that nature, true?
- 12 A. Yes.
- MR. MALLIN: Your Honor we would move
- 14 for the admission of Exhibit 533.
- JUDGE WOODRUFF: 533 has been
- 16 offered. Any objection to its receipt?
- 17 MS. TATRO: Your Honor I note it's
- 18 not a complete copy of the 10K, just excerpts and
- 19 to the extent that MIEC would provide the entire
- 20 portion for the record, I appreciate not killing
- 21 trees unnecessarily, but --
- 22 MR. MALLIN: I would be more than
- 23 happy to do that, I know it was used yesterday and
- 24 I believe, I don't know if it was in its entirety
- 25 but I can substitute that.

Page 2467 And Your Honor I believe we need now 1 2 to remove the chart as well from the television 3 screen. JUDGE WOODRUFF: It's not being web 4 5 cast. 6 MR. MALLIN: Okay. 7 JUDGE WOODRUFF: The camera was not 8 pointed at it but I appreciate that. 9 MR. MALLIN: Just trying to be very careful. Thank you. 10 11 (BY MR. MALLIN) Let's talk a little Q. 12 bit about this wholesale proposal --JUDGE WOODRUFF: I'm sorry, I don't 13 think I made a ruling. 533 will be admitted with 14 the substitution. 15 16 MR. MALLIN: Thank you, Your Honor, I 17 apologize. 18 Q. (BY MR. MALLIN) Let's talk a little bit Mr. Smith about the wholesale proposal. Do you 19 20 believe Noranda did everything it could to try to 21 get to a wholesale proposal agreement with Ameren? 22 Yes, I do. Α. 23 Q. There seems to have been some 24 suggestion that somehow you may have reached a 25 fiduciary duty by not agreeing to one, do you

Page 2468

1	believe	+ha+	to h	a +ha	93503
T	perreve	Lnat	LO D	e cne	case:

- 2 MS. TATRO: I'm just going to object
- 3 that is absolutely a mischaracterization of what I
- 4 stated. I did not state that anyone at Noranda
- 5 violated a fiduciary duty.
- JUDGE WOODRUFF: Okay. That's what I
- 7 recollect as well.
- 8 You can go ahead and answer that
- 9 question about fiduciary duty --
- 10 MR. MALLIN: I'll restate it Judge.
- 11 Q. (BY MR. MALLIN) Do you believe in
- 12 any way, sir, you breached any sort of fiduciary
- 13 duty as the CEO off Noranda in not reaching that
- 14 agreement with Ameren?
- 15 A. Absolutely not.
- 16 **Q.** Why not?
- 17 A. First and foremost we entered into
- 18 good faith negotiations with Ameren. We, for a
- 19 number of reasons. First and foremost they're our
- 20 largest supplier and we felt, we've always in every
- 21 one of the rate cases we've always tried to get to
- 22 a global settlement and we became very passionately
- 23 committed to trying to get to a global settlement
- 24 in this case in part to address some of the
- 25 questions and directions from the Public Service

Page 2469

- 1 Commission itself. So we undertook these
- 2 negotiations in the best of faith and I can tell
- 3 you that I believe that Ameren did as well. Their
- 4 focus and their commitment of time, Michael Moehn
- 5 was very professional, we routinely met at the drop
- of a hat, we had at least eight meetings face to
- 7 face, the first started with our teams and then
- 8 typically as we got later in the negotiations he
- 9 and I, well in all the negotiations he and I would
- 10 always have one-on-one time together and in many of
- 11 our later meetings it was just he and I meeting
- 12 together. We went through and looked at both
- 13 retail and wholesale structures, a wholesale
- 14 structure was proposed by Ameren to provide a rate.
- 15 We spent a lot of time on this and we ultimately
- 16 got to a point where we, there was risk created by
- 17 this structure that was, our principle had always
- 18 been if we could get the available value at the
- 19 same risk we were really quite indifferent to the
- 20 structure as long as our behaviors and the
- 21 behaviors that we wanted to exhibit could still, we
- 22 would still be participating in the process, things
- 23 like that, and we just got to a point where we had
- 24 an impasse because we weren't willing to take the
- 25 incremental risk associated with the wholesale

Page 2470

- 1 structure and nor was Ameren.
- Q. Mr. Smith, was it your opinion that
- 3 any party walked away from those negotiating
- 4 tables?
- 5 A. No, not at all. In fact there was,
- 6 you know, I certainly left that last meeting very,
- 7 very disappointed and I obviously can't speak for
- 8 Mr. Moehn but there was no, nobody stormed away
- 9 from a negotiating table.
- 10 Q. You mentioned the impasse. Was there
- 11 a particular issue?
- 12 A. Yes. It was, and again it was just
- 13 the structure that was proposed by Ameren was a
- 14 wholesale structure. We worked in that vain and
- when we got to the end we just realized that
- 16 although this type of risk was kind of inherent in
- 17 the structure it was, with the size of our purchase
- 18 neither party was willing to accept that risk.
- 19 Q. Let's talk a little bit about the rod
- 20 **mill**.
- 21 A. Sure.
- 22 O. Since June of 2014 has Noranda been
- 23 able to finance all or any part of that
- 24 construction?
- A. No, we have not.

Page 2471

- 1 O. Is it still the case that Noranda has
- 2 a customer willing to take all if not substantially
- 3 all of the product that would be made by that rod
- 4 mill?
- 5 A. Yes, we do, and we're very blessed to
- 6 have a customer big enough to, you know, a single
- 7 customer to form the sufficient foundation for us
- 8 to commit to build it.
- 9 Q. And in terms of dollars and cents how
- 10 much financing has Noranda sought with regard to
- 11 that rod mill?
- 12 A. We were originally, well right now
- 13 we're seeking 15 million which is roughly a third
- 14 of the total cost of the rod mill.
- 15 Q. And Noranda's been unable to get
- 16 that.
- 17 A. That's correct. And we've started on
- 18 a much higher level and Mr. Boyles can give you the
- 19 specifics on that. We started out at a much higher
- 20 level trying to finance more of the rod mill but we
- 21 were, given our financial circumstance and the
- 22 concern about power we were unable to get financing
- 23 for a larger amount. We reduced the amount to \$15
- 24 million and to date we have been unable to get that
- 25 incremental financing.

Page 2472

- 1 Q. Do you believe that that has any
- 2 impact with regard to the refinancing that Noranda
- 3 must do in 2017 and 2019?
- 4 A. It's obviously a deep concern for me
- 5 because to have a circumstance where we have
- 6 literally an asset backed \$15 million loan that we,
- 7 that we can't get done I just have to ask the
- 8 question how are we going to get, you know, \$265
- 9 million asset back, you know, credit facility done
- 10 and then how are we going to refinance \$668 million
- 11 worth of long term debt.
- 12 Q. Do you see a path to do that?
- 13 A. Well, Mr. Boyles is probably a better
- 14 person to ask on that but I would tell you that I'm
- deeply concerned because I don't see a path.
- 16 Q. Let's talk a little bit about the
- 17 layoffs that one of the commissioners asked you
- 18 about. Did in fact Noranda send out layoff notices
- 19 after the last decision?
- 20 A. We did.
- 21 Q. Did subsequently Noranda return some
- of those employees to work?
- A. We did.
- Q. Can you give me a little bit of
- 25 history on how that came about?

Page 2473

1	A. Certainly. By the time we finished
2	with our, the first phases of our layoffs we had
3	reduced in total approximately 58, well not
4	approximately, we had reduced 58 people. When we
5	encountered our difficulties associated with the,
6	when we encountered our difficulties associated
7	with the pot lines and we had this surge of pot
8	lines that went out because we rebuilt so many at
9	one time because of the ice storm and then we had
10	some early pot failures the reality was we just
11	didn't have the manpower to get those lines back up
12	and running and if you run below a certain level of
13	pots you can actually have a pot line or more just
14	spontaneously go down so we had to rebuild these
15	pots. In order to rebuild the pots we were going
16	to have to bring specialized contractors to do so,
17	in order to do that we were going to have to get
18	the cooperation of the union because that's a
19	contracted for, that's a contracted for, it's a
20	contracting out and that requires approval from the
21	union. So what we agreed with the union in order
22	to be able to accommodate bringing in those
23	contractors was that we would delay, we would bring
24	additional Noranda employees into the system and
25	then we would delay the layoffs that, any

Page 2474

- 1 consideration of the layoffs that we had announced
- 2 in our previous rate case testimony until the end
- 3 of May.
- 4 Q. May of 2015?
- 5 A. That's correct.
- 6 Q. And over that period of time, so May
- 7 of 2015, why was that date chosen?
- 8 A. Well, first we expected to have a
- 9 determination of the rate case by then because we
- 10 communicated that look, if we had the rate we would
- 11 obviously honor the head count commitments and we
- 12 would be running the plant and taking the first
- 13 steps on our journey on sustainability. If we
- 14 didn't have the rate then all bets were off and I
- 15 had personal conversations with the union about
- 16 that, there was obviously, you know, that was a
- 17 direct communication by me to the union.
- 18 Q. And just so that I understand, why
- 19 would Noranda be repairing or replacing a pot if it
- 20 was thinking about whether or not to curtail the
- 21 plant?
- 22 A. Well, as I mentioned earlier the cost
- 23 of restarting these things can be, especially in
- 24 our circumstance, prohibitive. We have now made
- 25 the decision to shut down the plant yet we are

Page 2475

- 1 still very hopeful that we can work together to get
- 2 rate relief and to make the facility viable and so
- 3 we didn't want these things to shut themselves
- 4 down.
- 5 Q. Any safety issue associated with the
- 6 shutdown?
- 7 A. That's another huge issue for us,
- 8 when you put people into an environment where a
- 9 facility that large when each one of these pot
- 10 lines is over 2,000 feet long and if they go out of
- 11 control and start shutting themselves down then,
- 12 you know, obviously we have a concern. We know how
- 13 to run plants safely and frankly we know how to
- 14 deal with them when we have severe challenges but
- 15 you just don't want to expose your work force to
- 16 that kind of challenge.
- 17 MR. MALLIN: Your Honor this next
- 18 section will need to be In camera.
- JUDGE WOODRUFF: Before we go In
- 20 camera how much more do you have?
- MR. MALLIN: 15 minutes probably.
- 22 JUDGE WOODRUFF: The reason I ask is
- 23 because the people are here to fix the air
- 24 conditioning.
- MR. MALLIN: Let's recess and let

		Page 2476
1	them do that.	
2	JUDGE WOODRUFF: We'll take a short	
3	break before going In camera and we'll come back at	
4	9:20.	
5	MR. MALLIN: Thank you, Your Honor.	
6	(RECESS TAKEN BY PARTIES)	
7	JUDGE WOODRUFF: All right, we're	
8	back from our break and ready to get started and	
9	hopefully the air-conditioning is going to be	
10	working a little bit. I see some thumbs up out	
11	there so hopefully it will be a little bit cooler	
12	at this point.	
13	MR. MALLIN: Thank you, Your Honor.	
14	Are we in HC at this point?	
15	JUDGE WOODRUFF: We will go into HC	
16	at this point.	
17		
18	(REPORTER'S NOTE: An in-camera session was held,	
19	which is contained in Volume 34, pages 2488-2489 of	
20	the transcript.)	
21		
22		
23		
24		
25		

Page 2477 1 2 Q. (BY MR. MALLIN) Yesterday you were 3 asked some questions about Apollo. Just so that I'm perfectly clear what is the actual number of 4 5 directors on Noranda's board? Α. There are 12 including myself. Q. 12 in total. 8 Α. Yes. 9 Q. And of the 12 how many are 10 independent as reported to the SEC and others? There are four Apollo directors then 11 Α. 12 myself and then seven independents. 13 Q. There were dividends paid in the past 14 to all shareholders, special dividends, is that not 15 right, sir? 16 Yes, that's correct. Α. 17 Q. One of whom would have been Apollo. 18 Α. That's correct. 19 Q. Do you believe that any of those 20 special dividends paid in the past affects 21 Noranda's ability today to be able to refinance its 22 debt in 2017 and 2019? 23 MS. TATRO: I'm going to object that 24 this is beyond the scope of any cross that, recross

Fax: 314.644.1334

that I asked or commissioner questions. It may be

25

Page 2478

- 1 responsive to an opening statement but that's not
- 2 what redirect is for.
- JUDGE WOODRUFF: I'm going to
- 4 overrule the objection, I think it's fair.
- 5 A. I think the issues associated with
- 6 Apollo in general and in whole are really old news.
- 7 The last dividend, special dividend that we did was
- 8 in 2012 and I would like, and that was actually a
- 9 question that was asked by Commissioner Kenney, I
- 10 would like to make one correction to the answer
- 11 that I gave.
- 12 Our first regular quarterly dividend
- 13 didn't start in 2013, it was actually the first
- 14 quarter of 2011 so it was actually a little bit
- 15 earlier than what I stated. Really what we're
- 16 talking about now when it comes to affordable
- 17 power, and this is really all about affordable
- 18 power and how we go forward is, you know, the
- 19 future of New Madrid so frankly I think the
- 20 discussion of Apollo is a bit of a red herring and
- 21 I think that the reason that, why we're here, is to
- 22 address the issue of us having an affordable and
- 23 sustainable power aid.
- 24 Q. Just one last question Mr. Smith so
- 25 that I'm clear. Are you employed in any capacity

Page 2479 today by Apollo? 2 I am not and never have been. I've 3 never received a paycheck from Apollo. I've always been employed by the company that I run. 4 5 MR. MALLIN: Thank you, Your Honor. 6 JUDGE WOODRUFF: And Mr. Smith you 7 can step down. 8 Α. Thank you. Thank you very much for your time. 10 JUDGE WOODRUFF: And the next Noranda witness then would be Mr. Boyles. 11 12 (Whereupon, the witness was sworn) 13 MR. MALLIN: Has the witness been 14 sworn? 15 JUDGE WOODRUFF: Yes. 16 MR. MALLIN: Okay. Thank you, Your 17 Honor. 18 DIRECT EXAMINATION 19 QUESTIONS MR. MALLIN: 20 Q. Could you state your full name? 21 Α. Dale Wayne Boyles. 22 Mr. Boyles, by whom are you employed? Q. Noranda Aluminum. 23 Α. 24 In what capacity? Q. 25 As chief financial officer. Α.

Page 2480

- Q. And did you cause to have prepared
- 2 and filed with the Public Service Commission
- 3 certain direct and surrebuttal testimony for this
- 4 case?
- 5 A. Yes, I did.
- 6 Q. And are those before you as Exhibit
- 7 600 with regard to your direct testimony and 601
- 8 with regard to your surrebuttal testimony?
- 9 A. Yes.
- 10 Q. And if I were to ask you the
- 11 questions that are posed in both of those
- 12 testimonies would your answers to those questions
- 13 be the same today?
- 14 A. Yes.
- 15 Q. Is there any changes that you wish to
- 16 make with regard to those testimonies other than
- 17 the start date that you had for Noranda?
- 18 A. No other changes other than the start
- 19 date.
- 20 Q. And in order to be complete for the
- 21 record what was your start date at Noranda?
- 22 A. It was November of 2013, not October
- 23 of 2013.
- 24 Q. And other than that change are all of
- 25 those answers still true and correct today?

		Page 2481
1	A. Yes, they are.	
2	MR. MALLIN: Your Honor I'd move for	
3	the admission of Exhibits 600 and 601.	
4	JUDGE WOODRUFF: 600 and 601 both HC	
5	and NP have been offered, any objection to their	
6	receipt?	
7	Hearing none they would be received.	
8	MR. MALLIN: I tender the witness	
9	Your Honor.	
10	JUDGE WOODRUFF: We'll begin with	
11	Public Counsel.	
12	MR. ALLISON: No questions.	
13	JUDGE WOODRUFF: MECG?	
14	MR. WOODSMALL: No questions.	
15	JUDGE WOODRUFF: Then for United For	
16	Missouri?	
17	MR. LINTON: No questions.	
18	JUDGE WOODRUFF: For Staff?	
19	MR. THOMPSON: No questions. Thank	
20	you, Judge.	
21	JUDGE WOODRUFF: Ameren.	
22	MR. NELSON: If it please the Court	
23	I'm going to work from the podium because I'm going	
24	to be back and forth from the Elmo quite a bit.	
25	JUDGE WOODRUFF: That is helpful.	

		Page 2482
1		
2	CROSS EXAMINATION	
3	QUESTIONS BY MR. NELSON:	
4	Q. Good morning Mr. Boyles.	
5	A. Good morning.	
6	Q. Nice to see you again, sir.	
7	A. Nice to see you.	
8	Q. I want to follow up little bit on	
9	your experience and your job history. As you've	
10	just mentioned you've been the CFO at Noranda since	
11	November of 2013, correct?	
12	A. That's correct.	
13	Q. So a little over what, 16 months?	
14	A. Approximately.	
15	Q. There about. Before that, your job	
16	before that you worked for an apparel company,	
17	correct?	
18	A. Correct.	
19	Q. Hanes.	
20	A. Hanes Brands.	
21	Q. Would it be fair to say when you were	
22	working with Hanes Brands you didn't have any	
23	experience in the metal industry?	
24	A. That would be fair.	
25	Q. They do a lot of things but aluminum	

Page 2483 isn't one of them, correct? 2 Α. No, it's not. 3 Q. Before that you worked at KPMG, correct? 4 5 Α. That's correct. They're an accounting firm. Q. 7 That's correct. Α. 8 Q. And likewise you didn't really do anything with metals when you were with KPMG. 10 I don't remember, I may have had some Α. clients that were metal producers or extruders but 11 I don't remember. 12 13 Q. Nothing that sticks out in your mind. 14 Α. No. 15 Q. Prior to that you worked at a company 16 called National Gypsum. 17 Α. Yes, approximately one year. 18 And National Gypsum, they produced Q. and mined gypsum and turned it into things like 19 20 wallboard. 21 Α. That's correct. 22 Q. Not anything in the aluminum 23 industry. 24 That's correct. Α. 25 You didn't do any forecasting work at Q.

Page 2484

- 1 National Gypsum for example with respect to
- 2 aluminum prices.
- 3 A. No.
- 4 Q. Before that you worked at a company
- 5 called Collins and Aikman, correct?
- 6 A. That's correct.
- 7 Q. They did automotive trim products?
- 8 A. That was one of their segments.
- 9 Q. They didn't work in the aluminum
- 10 industry.
- 11 A. No. It was interior trim and
- 12 exterior trim type products.
- 13 Q. And you didn't do any work in terms
- of metal, aluminum price forecasting, aluminum
- 15 price scenarios and things like that when you were
- 16 at Collins and Aikman, fair?
- 17 A. That's fair.
- 18 Q. And before that you worked at a
- 19 different accounting firm, Arthur Young, correct?
- 20 A. Yes, they became Ernst and Young.
- 21 Q. That was one of the big six and know
- 22 what are we down to, three or four I guess?
- 23 A. Four.
- 24 Q. Likewise no work on metals issues
- 25 that you can recall, correct?

Page 2485 1 Α. Not that I can recall. 2 So really the aluminum industry is Q. 3 brand new to you as of 2013, fair? Α. It's fairly new, yes. 4 5 Now, there's been some discussion in Q. this case about a company called Apollo. You're 6 7 familiar with Apollo. 8 Α. Yes. 9 Q. And Apollo owned a pretty good chunk of Noranda's stock, fair? 10 Yes, approximately 33, 34 percent. 11 Α. 12 And as part of your work as CFO you Q. 13 have to sign off on SEC documents from time to 14 time, correct? 15 Α. That's correct. 16 MR. NELSON: Your Honor, may I 17 approach the witness? JUDGE WOODRUFF: You may. 18 19 Q. (BY MR. NELSON) I'm going to hand 20 you a 10K from December 31, 2014, part of it's been 21 marked as 533 and I believe ultimately the entire 22 thing will be substituted in as 533. So looking at 23 that you see on the front cover, do you recognize that as Noranda Aluminum Holding Corporation's 10K 24 25 filing with the United States Securities and

Page 2486

- Exchange Commission for the year ending December
- 2 31, 2014?
- 3 Α. That's correct.
- And if you turn to the very back of 4 Q.
- 5 that document, the very last, very, very last page
- 6 there's a Chief Financial Officer Certification,
- 7 correct?
- 8 Α. Yes.
- Q. And that's your signature.
- 10 Α. That's correct.
- 11 And you signed that saying that Q.
- 12 everything in here is true to the best of your
- 13 knowledge and belief, correct?
- 14 Α. That's correct, to the best of my
- 15 knowledge.
- 16 Q. If you turn, sir, to page 22 of the
- 17 document, right at the top of the page.
- Okay. I'm sorry. 18 Α.
- 19 We're here all day so don't worry Q.
- 20 about it.
- 21 Right at the top of that page 22
- 22 there's a statement about Apollo, correct?
- 23 Α. That's correct.
- 24 If you read along with me, Apollo has Q.
- the ability to substantially influence our company 25

Page 2487 and the outcome of matters voted upon by our shareholders and to prevent actions which a 3 shareholder may otherwise do favorably. 4 Did I read that correctly? 5 Α. Yes. 6 That's a statement to the Securities Q. 7 and Exchange Commission about Apollo's continuing 8 influence over Noranda, fair? It is a risk factor that we list in Α. 10 our 10K. 11 And the next paragraph down you talk Q. 12 about Apollo owning a little over 33 percent of the 13 common stock, do you see that? 14 Α. Yes. 15 And that paragraph ends with the sentence thus, Apollo has the ability to 16 17 significantly influence our decisions. 18 Did I read that correctly? 19 Α. Yes. 20 Likewise a true statement? Q. 21 Α. They do through being members of the board of directors, yes. 22 23 Q. And the fact that they're a 33 24 percent shareholder of the company, correct? 25 Well, we have to have an independent Α.

Page 2488

- 1 board per the Stock Exchange rules so they could
- 2 never be the majority of the board. So they can
- 3 influence decisions as members of the board of
- 4 directors.
- 5 Q. But you're not suggesting to us based
- on your corporate history that if one company that
- 7 owns a third of a company you work for doesn't have
- 8 any influence, you're not telling us that, are you?
- 9 A. No, we list it as a risk factor.
- 10 They have influence as members of the board of
- 11 directors.
- 12 O. Let's talk about CRU. You've heard
- 13 of them.
- 14 A. Yes.
- 15 Q. You'd agree with me they're an
- 16 intelligence firm that provides aluminum market
- 17 data and forecasts?
- 18 A. Yes.
- 19 Q. You consider them to be an expert in
- 20 the aluminum market, correct?
- 21 A. Yes.
- 22 Q. And in fact you use their data in
- your operations.
- A. Yes, we do.
- 25 Q. You communicate CRU data to others.

		Page 2489
1	Α.	We do occasionally, yes.
2	Q.	For example you communicate it to
3	your investor	s.
4	Α.	Yes.
5	Q.	Communicate it to analysts, Wall
6	Street types.	
7	Α.	That's correct.
8	Q.	And you're familiar with Mr. Colin
9	Pratt.	
10	Α.	Yes, I am.
11	Q.	He works for CRU, doesn't he?
12	Α.	Yes, he does.
13	Q.	And you in fact have read his direct
14	testimony.	
15	Α.	Yes, I have.
16	Q.	Didn't disagree with anything he said
17	in there, did	you?
18	Α.	No.
19	Q.	You've read his surrebuttal
20	testimony.	
21	Α.	Yes, I have.
22	Q.	You didn't disagree with anything you
23	read in there	either.
24	Α.	No.
25	Q.	You didn't question anything you read

Page 2490 in there. 2 A. I didn't question anything, I've 3 certainly looked at his observations and took them into context of all scenarios that we prepared. 5 Q. In fact, you relied on some of Mr. Pratt's testimony to do some of the work you did in 7 this case, correct? Α. 8 That is correct. We work very closely with CRU. 10 And you're aware that CRU puts out Q. 11 quarterly and annual forecasts of aluminum prices, 12 correct? 13 Α. Yes. 14 Q. And those are forecasts that you rely 15 upon in your daily work? 16 Α. Occasionally in preparing forecasts, 17 yes. 18 And you did some scenarios, now you Q. 19 also did some scenarios in this case of 20 hypothetical future aluminum prices, correct? 21 Α. That's right. As part of our risk contingency plan. 22 23 **Q**. Let's talk about the scenarios you 24 put together. 25 I'm sorry, did you say you did that

Page 2491

	1	as	part	of	your	risk	contingen	СУ	plan?
--	---	----	------	----	------	------	-----------	----	-------

- 2 A. Yes. We did some, you know, these
- 3 scenarios as a way to demonstrate the likely
- 4 outcomes but we didn't have a way to analyze the
- 5 volatility of aluminum prices prior to my arriving
- 6 at the company, so we prepared a more robust
- 7 analysis now.
- 8 Q. You did those scenarios for this
- 9 case, didn't you?
- 10 A. Yes, but the company lacked that
- 11 capability to begin with and it was something I
- 12 believe that we needed as a company.
- 13 Q. Now, you started your analysis, those
- 14 scenarios you put together, first thing you did was
- said let's figure out a length of an aluminum price
- 16 cycle, correct?
- 17 A. I believe that was one of the first
- 18 assumptions we looked at, yes.
- 19 Q. Now, you didn't run a statistical
- analysis to determine the length of an aluminum
- 21 price cycle, correct?
- 22 A. No, I did not run a statistical
- 23 analysis but what I did do is look at the projected
- 24 average price that CRU was projecting over the next
- 25 10 years so we took that based on, along with other

Page 2492

- 1 information based on information I gathered from
- 2 internal resources that have been in the industry
- 3 for many years to develop a 10 year cycle.
- 4 Q. Maybe I wasn't real clear.
- 5 A. I just wanted to make sure, we didn't
- 6 pull it out of the air.
- 7 Q. You didn't run a statistical analysis
- 8 to determine the length of an aluminum price cycle,
- 9 assuming that that could even be done, fair?
- 10 A. No, we did not run a statistical
- 11 analysis.
- 12 Q. Now that would be one way you could
- determine whether or not there was an aluminum
- 14 price cycle of a defined length, correct?
- 15 A. It would be one way of many ways.
- 16 Q. It would be a way that a scholar, an
- 17 economist or somebody who's trained in statistics
- 18 would do that, fair?
- 19 A. That's fair but we don't have the
- 20 ability to be able to afford a full-time economist
- 21 on staff so we have to make use of the best
- 22 resources and information available that we can.
- 23 Q. How much have you paid CRU in this
- 24 case?
- 25 A. I have no idea.

Page 2493

- 1 Q. Another way to establish a cycle is
- 2 simply to assume one, correct?
- 3 A. Yes. Another way is just to assume
- 4 one.
- 5 Q. And that's what you chose to do, you
- 6 chose to assume the length of a price cycle?
- 7 A. Based on the best information I had
- 8 available to make that decision. I didn't pull it
- 9 out of the air.
- 10 Q. And let's talk for a minute about the
- 11 cycle length. The length of the cycle is important
- 12 to the rest of your analysis, isn't it?
- 13 A. It is, but, you know we did start
- 14 with a 10 year cycle but as we, you know, submitted
- our request we only show seven years so essentially
- 16 it's a 10 year cycle and we showed a seven year
- 17 cycle as well.
- 18 O. I'm not a statistician but I think I
- 19 understand this, see if you and I can agree on
- 20 this. If you have a cycle of 10 years you're going
- 21 to have some years that are going to be below sort
- of the average line and some years that are going
- 23 to be above, correct?
- A. That's correct.
- Q. That's why you call it a cycle.

Page 2494 Α. 1 Right. 2 If you have a five year cycle you're Q. 3 going to have some years below your average line and some years above your average line, correct? 4 5 Α. That's correct. But if you have a five year cycle the 6 Q. 7 down years and the up years all have to occur 8 within that five year time period, right? Well, in any time period they all 9 Α. have to occur. 10 11 Q. Right. 12 So it doesn't matter if it's five, 10, 15, 50, right? 13 14 I was just using five as an example. Q. If we use six instead, the down years and the up 15 16 years would all have to occur within that six year 17 period, right? 18 Α. That's correct. 19 Q. In the scenarios that you ultimately 20 chose, your scenarios A1, A2 and A3, you have down 21 years all the way year one to year seven, right? 22 I'm sorry, down years as of what? Α. 23 Q. Well, years you're below the average. 24 Below the average of what? Α. 25 Below your average of your cycle for Q.

Page 2495

- 1 the entire 10 years.
- 2 A. In my scenarios, in my exhibits what
- 3 I did was start with the mean and then we based,
- 4 you know, calculated the volatility based on
- 5 historical volatility ranges so then we calculated
- 6 the prices from there, we didn't just put in
- 7 prices.
- 8 Q. Let me see if I can help you.
- 9 A. Maybe I didn't understand your
- 10 question.
- 11 Q. Were you here yesterday when we
- 12 talked to Dr. Humphreys?
- 13 A. Yes, I was.
- 14 Q. And you understand then that that
- 15 blue line, that's your prices in terms of the A2
- 16 average that you calculated, the A2 scenario?
- 17 A. I don't know for sure. I don't know
- 18 the source of this data.
- 19 Q. Looks about right now, doesn't it?
- 20 A. Yes, this is I believe one scenario
- 21 that was picked so I don't know if it, it's, you
- 22 know, representative.
- Q. Okay. Well, we can answer that in a
- 24 minute. Let's stick with A2 here for a minute.
- 25 A. Okay.

Page 2496

- 1 Q. In the A2 scenario you have what,
- 2 years one through six or one through seven where
- 3 the price is pretty low?
- 4 A. I would have to look at my testimony.
- 5 Q. Well, just look at that red line,
- 6 that's the CRU average price of \$1.06. Does your
- 5 blue line look lower than the red line?
- 8 A. Yes, the average was \$1.06 that we
- 9 started with, they computed the volatility, that's
- 10 correct.
- 11 Q. And as we talk about with any cycle
- 12 the way you call it a cycle is you've got a whole
- 13 bunch of really high prices in the last two or
- 14 three years, right?
- 15 A. Yes. You have peaks and you have
- 16 troughs.
- 17 Q. Peaks and troughs.
- 18 A. That's correct.
- 19 Q. Exactly. If we were to draw that as
- a five year cycle we'd have to have those high
- 21 prices in the first five years, correct?
- 22 A. Maybe under this one, yes. Right.
- 23 Q. That's again our definition of cycle?
- A. But you have to establish conditions
- of where you are today to be able to assume the

Page 2497

- 1 right scenario.
- Q. We'll get to that in a minute. But
- 3 the point is, would you believe me or do I need to
- 4 show you, if I put up your A1 graph and your A3
- 5 graph we're going to see those blue lines are going
- 6 to be below the average in the first five, six
- 7 years. Can we agree on that or do I need to show
- 8 you?
- 9 A. Well, I don't know, I didn't graph
- 10 them out, I just, you know, they're in my
- 11 testimony.
- 12 Q. Okay. So you took a 10 year cycle,
- 13 correct?
- 14 A. That's correct.
- 15 Q. But in fairness you'd acknowledge
- 16 that the actual cycle that might apply could be
- more or less?
- 18 A. Could be more or less and I believe
- 19 Mr. Humphreys yesterday could not define an actual
- 20 cycle.
- 21 Q. In fact the reason he couldn't define
- 22 an actual cycle given his 37 years of experience
- 23 and his service on statistical boards and his
- 24 service as a chief economist is because he said
- 25 particularly with globalization there is no defined

Page 2498

- 1 cycle. You heard that, correct?
- 2 A. I heard his testimony, yes, but again
- 3 the best information I had to determine that 10
- 4 year cycle.
- 5 Q. To assume a 10 year cycle, fair?
- 6 A. Well, yes. There's all kinds of
- 7 assumptions in the model.
- 8 Q. Now, you've never used this model
- 9 before at Noranda, have you?
- 10 A. No. As I said we've recently
- 11 developed this more robust analysis, you know, to
- 12 use.
- 13 Q. And you didn't generate an analysis
- 14 like this before this case sort of for ordinary
- 15 course work at Noranda, fair?
- 16 A. That's fair.
- 17 Q. When you did this cycle analysis you
- 18 generated 11 different what you call I think
- 19 volatility curves?
- 20 A. Yes. Scenarios, uh-huh.
- 21 Q. Scenarios. Now, you only took three
- of those 11 scenarios in your direct testimony and
- 23 worked them through all the way to a final answer,
- 24 correct?
- 25 A. That's correct.

Page 2499

- 1 Q. You disregarded eight of them, you
- picked three to study further, correct?
- 3 A. That's correct. We eliminated
- 4 certain of those cycles because of the starting
- 5 conditions.
- 6 Q. And you call those, the ones you
- 7 picked, you call those A1, A2 and A3.
- 8 A. I believe those are exhibit numbers,
- 9 yes.
- 10 Q. Okay. And in your surrebuttal you
- 11 told us the reason you picked these three was
- 12 because of some testimony by Mr. Pratt, correct?
- 13 A. Yes, about beginning market
- 14 conditions. Because when you look at the scenarios
- 15 as Mr. Humphreys said yesterday it's difficult to
- 16 predict where you are in a cycle, I agree, but I
- 17 can't just throw up my arms and say I give up. You
- 18 know, for me as CFO I've got to evaluate the best
- 19 information I have at that time and make the best
- 20 judgments I can so I have to try to pick a place so
- 21 we work closely with CRU to determine that starting
- 22 point.
- 23 Q. So you work closely with CRU.
- A. That's correct.
- 25 Q. And this was before you put together

Page 2500

- 1 your direct testimony?
- 2 A. During the preparation.
- 3 Q. Well, there was a date you filed your
- 4 direct testimony, right?
- 5 A. That's correct.
- 6 Q. And is it your testimony you worked
- 7 closely with CRU prior to that date?
- 8 A. We did have some discussions about
- 9 what were the right starting points and things like
- 10 that, various assumptions.
- 11 Q. You told us in your testimony, and I
- 12 think we heard in opening too, that you worked
- 13 closely with CRU.
- 14 A. Yes, we worked closely with.
- 15 Q. Did you work closely with CRU before
- 16 you filed your direct testimony?
- 17 A. We certainly had conversations, yes.
- 18 Q. You had some conversations.
- 19 A. Yes.
- 20 Q. You talked to them a little bit.
- 21 A. Yes.
- Q. Okay. Now, in the testimony for Mr.
- 23 Pratt that you relied on in terms of picking which
- 24 of these 11 scenarios you wanted to talk about with
- 25 the Commission, that testimony was that the market

Page 2501

- 1 was not expected to be tight over the next several
- 2 years, correct?
- 3 A. That's correct. Meaning there did
- 4 not seem to be upward pressure on pricing to raise
- 5 prices.
- 6 Q. So you interpreted that testimony as
- 7 Mr. Pratt saying there would be no significant
- 8 upward or downward trends for 2016, correct?
- 9 A. That's correct. And I believe he
- 10 also added the year 2017 to that.
- 11 Q. And that was going to be my next
- 12 question, you understood his testimony to be no
- 13 significant upward or downward trends for 2017,
- 14 correct?
- 15 A. In the near term.
- 16 Q. And in fact if we look at your A2
- 17 case you are, you're pretty significantly under
- 18 CRU's forecast for 2016, 2017 and 2018, is that
- 19 fair?
- 20 A. No, I don't think it's significantly
- 21 different.
- 22 O. You don't think the difference
- 23 between that green line, that green bar and that
- 24 blue line is significant?
- 25 A. It depends on what day you're talking

Page 2502

- 1 about too because prices have changed since we
- 2 started with the model and through, you know, the
- 3 most recent date of that as talked about yesterday.
- 4 Q. I'm sorry, I didn't ask you about
- 5 prices yesterday, I'm talking about the work you
- 6 did for your direct testimony, okay?
- 7 A. Okay.
- 8 Q. Let's stick with that for the time
- 9 being. Fair?
- 10 A. That's fair.
- 11 Q. Now, you believe that Mr. Pratt and
- 12 CRU actually had already factored in this no tight
- 13 market to their forecast, correct?
- 14 A. I'm not sure but I would assume so.
- 15 Q. You believe that to be the case.
- 16 A. Yes. I believe he stated that there
- 17 is volatility implicit in the near term forecast.
- 18 Q. So when we're looking at these green
- 19 bars which are CRU's forecast numbers, they already
- 20 have this no tight market condition built in best
- of your belief, correct?
- 22 A. Best of my knowledge. But it doesn't
- 23 factor in all volatility.
- Q. And you'd agree with me that Mr.
- 25 Pratt didn't testify and he didn't tell you that

Page 2503 prices were going down in 2015, 2016 or 2017, 2 correct? 3 Α. That's correct. An in fact Noranda's internal 4 Q. 5 consensus when you talked to the other people in the C suite offices, the other leaders, their 6 7 internal consensus was no different from Mr. 8 Pratt's observation, fair? 9 Α. No, we didn't have anything to dispute that information. 10 11 Now, follow up a little bit more on Q. 12 your discussions with Mr. Pratt and I want to focus 13 on the discussions you had with Mr. Pratt before 14 you gave your direct testimony. Okay? 15 Α. Okay. And, but let's set a time line. 16 Q. 17 gave your direct testimony, correct? 18 Α. Yes. 19 Let's fix that point in our mind. Q. 20 And then Dr. Humphreys filed a rebuttal after your 21 direct testimony, correct? 22 Α. Yes. 23 Q. And then after Dr. Humphreys filed a 24 rebuttal Mr. Pratt filed a surrebuttal, correct? 25 That's correct. Α.

Page 2504

- 1 Q. And you've read that surrebuttal,
- you've already told us that.
- 3 A. Yes.
- 4 Q. And so you saw in that surrebuttal
- 5 where Mr. Pratt said you can't predict peaks and
- 6 troughs in a cycle. You saw that, correct?
- 7 A. Yes.
- 8 Q. Peaks being things like this little
- 9 blue line that goes up and troughs being the one
- 10 right here that goes down, those are peaks and
- 11 troughs, correct?
- 12 A. That's correct.
- 13 Q. In fact Mr. Pratt said it would the
- 14 lessor of two evils with a smooth line forecast,
- 15 correct?
- 16 A. I don't remember that statement.
- 17 Q. Did you read his deposition too, Mr.
- 18 Pratt's deposition?
- 19 A. No, I did not.
- 20 Q. Do you know if he used the word
- 21 misleading in talking about trying to predict peaks
- 22 and troughs?
- A. No, I did not.
- Q. Now in your surrebuttal you said that
- 25 the three cycles that you selected were not

Page 2505

- 1 sufficiently representative of potential price
- 2 cycles, you read that, right?
- 3 A. I did.
- 4 Q. You read in his surrebuttal when he
- 5 talked about you can't predict the timing of cycles
- 6 with accuracy, you saw that.
- 7 A. I don't remember those words, it
- 8 might be approximately true.
- 9 Q. Well, I don't want to misquote him,
- 10 so.
- 11 A. I just don't remember all of his
- 12 testimony right here.
- 13 **Q.** Sure.
- 14 I'm looking at page 2 of his
- 15 surrebuttal and if you'd like me to come over and
- show it to you I can, but page 2 of his
- 17 surrebuttal, line 12, Mr. Pratt says I believe Dr.
- 18 Humphreys and I agree that the timing of these
- 19 cycles can not be predicted with any accuracy.
- Does that refresh your memory?
- 21 A. Right. It's hard to predict what
- 22 we've tried to do with our scenario planning
- 23 because I can't just give up, I've got to do
- 24 something so --
- 25 Q. Sir, I'm not asking you about giving

Page 2506

- up, I'm asking you about what Mr. Pratt said, okay?
- 2 A. Right.
- 3 Q. Thank you.
- 4 And Mr. Pratt said that you couldn't
- 5 predict these cycles, I'm sorry, Mr. Pratt also
- 6 was, said that these cycles were not potentially,
- 7 were not sufficiently receptive of potential price
- 8 citations also because each of the scenarios you
- 9 chose, each of those three, showed a long sequence
- 10 of negative deviations from trend in the first
- 11 years of the cycle, correct?
- 12 A. That's correct. So that's why we
- 13 provide additional data.
- 14 Q. Okay. So what we're talking about
- 15 here is the fact that this blue line is under the
- green bars going out six, seven years into the
- 17 future, that's what we're talking about this long
- 18 negative deviation from trend.
- 19 A. Yes, but that's based on history.
- Q. Well, again we're talking Mr. Pratt's
- 21 criticisms of your model.
- 22 A. But you were talking those particular
- 23 lines, that's based on history.
- Q. That's what he's referring to though,
- 25 fair?

Page 2507

- 1 A. Right. Yes.
- 2 Q. Mr. Pratt also told us in his
- 3 surrebuttal that he thought you should have picked
- 4 a broader range of samples to show the Commission,
- 5 correct?
- 6 A. Yes. And we did in my surrebuttal.
- 7 Q. So when you were working and having
- 8 these conversations with Mr. Pratt provided by your
- 9 direct testimony did you just ignore all of these
- 10 points?
- 11 A. No, we didn't. We give them
- 12 consideration and that's why we provide the
- 13 different scenarios in this case but also to
- 14 understand, to give a visibility to the different
- 15 scenarios that we looked at.
- 16 Q. I'm sorry, again I'm referring to
- your direct testimony. Let's focus on that time
- 18 frame.
- 19 A. Okay.
- Q. Did you just ignore Mr. Pratt's
- 21 criticisms when you went ahead and filed your
- 22 direct testimony or had you not even heard it at
- 23 that point?
- A. I'm not sure at what point I heard
- 25 him, I don't remember that exact date but I did

Page 2508 consider those models and we thought that the three we filed were the most representative outcomes of 3 our scenario planning at that time. 4 Q. Now, the three scenarios that you 5 ran, let's be real clear, those are not price forecasts. 7 Α. No. 8 Q. You have not done a forecast of aluminum prices in this case, correct? 10 No, we have not. Α. 11 And you're not presenting these to Q. 12 the Commission as forecasts, correct? That's correct. 13 Α. 14 Q. What these are are stress tests. 15 Α. That would be an accurate statement, 16 yes. 17 Ο. Another word for it would be a sensitivity analysis. 18 19 A. Or scenarios, yes. 20 Q. Or scenario. Uh-huh. 21 Α. 22 Basically a what if, fair? Q. 23 That's fair. Α. 24 Q. Now, in order to run a stress test 25 you have to have a model or a formula or something

Page 2509

- 1 to run it through, correct?
- 2 A. That's correct.
- 3 Q. And in your case what you did is you
- 4 took these different prices that you calculated,
- 5 your blue lines on these kind of graphs, and you
- 6 put them into something called Noranda's enterprise
- 7 model, fair?
- 8 A. Yes. We did start with what the
- 9 actual projected mean, the CRU mean over the next
- 10 10 years being the \$1.06 and computed the
- 11 volatility based on history off of that and then
- 12 put those, and then converted those to nominal
- 13 values so that you reflect the change and then we
- 14 put those into the model, that's correct.
- 15 Q. Okay. And everything that you just
- 16 told us up until the last sentence, that was all
- 17 about these blue lines you were calculating,
- 18 correct? It's not about putting it in the
- 19 enterprise model, that's about how you got the
- 20 prices to begin with?
- 21 A. Yes. That's how we determined the
- 22 volatility, that's correct.
- Q. And that's all the stuff that we just
- 24 went through, all of Mr. Pratt's criticisms, right?
- 25 A. Right. That's the math around the

Page 2510 volatility because no one can predict the 2 volatility. 3 Ο. So let's talk now about the 4 enterprise model, let's move forward in your 5 analysis and talk about the enterprise model. 6 you with me? 7 Α. Okay. 8 Q. And in that enterprise model you put aluminum prices that you'd assumed into it, 10 correct? That's correct. 11 Α. 12 And then you had some other factors Q. 13 for things like different kinds of costs that you 14 were assuming, correct? 15 That's correct. Α. 16 Q. You had capital expenditures that you 17 assumed as part of all of this? That's correct. 18 Α. 19 And at the end of the day you came Q. 20 out with some liquidity figures that you provided 21 the commission, fair? 22 That's correct. Α. 23 Q. So you what you do is you put in some 24 inputs or assumptions and you see how that changes 25 the output, that's basically what we're talking

Page 2511

- 1 about when we're talking about a scenario or
- 2 sensitivity analysis.
- 3 A. It is but you have to take all those
- 4 assumptions of each other because they're all
- 5 highly correlated or related so you can't just
- 6 arbitrarily pick as an assumption and plug it into
- 7 the model.
- 8 Q. Well you could but the worse the
- 9 assumption the worse the output, correct?
- 10 A. Well, the math may work but you just
- 11 can't change one without giving consideration of
- 12 how this might impact the other assumptions.
- 13 Q. Now, I think you used the term
- 14 representative scenarios to describe these
- 15 scenarios in your direct testimony, do you recall
- 16 that?
- 17 A. Yes. Three, yes.
- 18 Q. Now, when you were using that term
- 19 representative scenarios what you meant was
- 20 receptive of the various scenarios that you ran,
- 21 correct?
- 22 A. Yes, receptive of what the most
- 23 likely starting points would be.
- Q. And most likely, when you use the
- 25 term most likely that means the most likely of the

Page 2512

- 1 scenarios you ran, correct?
- 2 A. Of the 11, yes.
- 3 Q. So from a universe of 11 when you
- 4 said to the Commission when you say hey this
- 5 scenario or that scenario was most likely you mean
- 6 the most likely of the 11 you chose to run?
- 7 A. Yes, the most likely of those 11
- 8 scenarios, that's correct.
- 9 Q. Now, when you used the term likely in
- 10 describing your scenarios for the Commission you
- 11 weren't including any actual calculation of
- 12 probability, correct?
- 13 A. That's correct.
- 14 Q. You weren't applying some sort of
- 15 statistics to this to say oh, I got a plus or minus
- 16 margin of error, right?
- 17 A. That's correct. We did not apply
- 18 statistical analysis.
- 19 Q. You weren't saying this scenario is
- 20 more likely to occur than CRU's forecast, nothing
- 21 like that, correct?
- 22 A. Well, we did say that the three
- 23 scenarios were the most representative of the 11
- 24 that we ran which included some of the CRU
- 25 information.

Page 2513

- 1 Q. Right. But you didn't run a
- 2 probability analysis of any sort to even suggest to
- 3 the Commission that it's somehow more likely that
- 4 one of your negative scenarios is going to occur
- 5 than CRU's best estimate forecast, correct?
- 6 A. We did not run a statistical
- 7 analysis, that is correct.
- 8 Q. You haven't done any calculation of
- 9 distribution probabilities around CRU's forecast?
- 10 A. No, we did not. We relied on them as
- 11 an expert.
- 12 Q. And you'd agree with me that the
- 13 three scenarios you chose have the most negative
- 14 cash flow events of any of the 11 scenarios,
- 15 correct?
- 16 A. Those are the outcomes, that's not
- 17 what we, you know, we did not pick those outcomes,
- 18 that's a result of the analysis we prepared.
- 19 Q. No, you picked the prices and that's
- 20 the outcomes you got, correct?
- 21 A. We chose the mean as I said from CRU
- 22 over the next 10 years and then we computed the
- 23 volatility based on actual historical volatilities
- 24 so we did not compute or select arbitrarily the
- 25 prices into the model so it was a computation of

Page 2514

- 1 historical volatility.
- 2 Q. You didn't run a single scenario
- 3 using CRU's forecast, correct?
- 4 A. Their forecast is included, embedded
- 5 in the scenarios.
- 6 Q. You don't have a single scenario that
- 7 you've run and shown to this Commission either on
- 8 direct or on surrebuttal where you plugged in as
- 9 the prices the CRU best estimate prices, correct?
- 10 A. Sorry, that's rather broad. My 2015
- 11 price was the CRU price at the time.
- 12 Q. I'll grant you that.
- 13 A. And I used the CRU forecast of 10
- 14 year mean average, okay, so I did use portions of
- 15 the forecast so I'm not sure which particular part
- 16 you're referring to.
- 17 O. Sure. Let me be a little more
- 18 specific.
- 19 A. Okay.
- Q. For 2017 there's a price that's well
- above your blue line price, correct?
- 22 A. For 2017? Are you talking about the
- 23 green part or which one are you talking about?
- 24 Could you ask that again, I'm sorry?
- 25 Q. Yeah, sure. The green bar which is

Page 2515 CRU's forecast price for 2017, that is above your 2 blue line, correct? 3 Α. That's correct. Same is true for 2018. 4 Q. Α. That's correct. Same for 2019. Q. That's correct. 7 Α. 8 Q. Same for 2020. That's correct. Α. 10 And you don't have a version of your Q. 11 scenarios where you took CRU's price for 2017 and 12 plugged it in to see what you get, correct? No, we did not take CRU's direct 13 forecast for those years and put those into the 14 15 model because they lacked the volatility analysis.

- Q. Well, they had implicit volatility in
- 17 them, correct?
- 18 A. I believe in the near term, yes. But
- 19 that doesn't include all volatility as Mr. Pratt
- 20 points out that it's very difficult to sit here and
- 21 predict outcomes with absolute certainty.
- 22 Q. And the CRU forecast represents the
- 23 best prediction that you're aware of, correct?
- 24 A. The best information I did have
- 25 available at the time, yes.

Page 2516

- 1 Q. And even as we sit here today that's
- 2 still the best prediction you're aware of, correct?
- 3 A. Yes. Based on what I know, yes.
- Q. Okay. So you never ran a model where
- 5 you used the best prediction you're aware of of
- 6 what future prices are going to be, correct?
- 7 A. That's correct. That would not be
- 8 smart in my position, I've got to determine what
- 9 the viability of this company is, under multiple
- 10 scenarios, not just the best case. So I have to
- 11 look at all cases and look at whether or not there
- 12 are likely outcomes. More likely than other
- 13 eventual outcomes.
- 14 Q. You left it to Ameren's experts to
- 15 actually run your model using the best forecast of
- 16 future prices that any of us have available, didn't
- 17 you?
- 18 A. Well, it's been well discussed about
- 19 the predictability and the volatility of aluminum
- 20 prices, it's difficult to take a forecast and then
- 21 just say that's the way it's going to turn out
- 22 because of the volatility.
- 23 Q. I'm sorry, maybe you didn't
- 24 understand my question.
- 25 A. Okay.

Page 2517

- 1 Q. The only people who've actually taken
- 2 the best forecast of a 2017 price that any of us
- 3 have and run it through your model is Ameren's
- 4 experts, correct?
- 5 A. I'm not sure I would agree with it's
- 6 the best case, best forecast.
- 7 Q. I thought we just established this.
- 8 You're not aware of a forecast that's better than
- 9 CRU's forecast, you just told us that.
- 10 A. Maybe I misunderstood your questions.
- 11 If you're talking about the forecast of actual
- 12 prices I do believe they are expert in aluminum
- 13 intelligence and industry conditions and that their
- 14 near term forecasts appear to be more accurate than
- 15 their long term forecasts of aluminum prices.
- 16 Q. In 2017 we can agree that's near
- 17 term, correct?
- 18 A. I believe that would be in the near
- 19 term, yes.
- 20 Q. Now, if we look at your surrebuttal
- 21 testimony you did include at the back of your
- 22 surrebuttal testimony five little graphs, correct?
- A. Is that the page you're referring to?
- Q. Yes. It's page, Schedule DB1.
- 25 A. Yes.

		Page 2518
1	Q. So	
2	MR. NELSON: Ken is this highly	
3	confidential?	
4	MR. MALLIN: If you're going to go	
5	into the individual numbers, yes.	
6	JUDGE WOODRUFF: Go into HC?	
7	MR. NELSON: I guess so Your Honor.	
8	MR. NELSON: Thank you, Your Honor.	
9	JUDGE WOODRUFF: And we will go	
10	in-camera.	
11	(REPORTER'S NOTE: An in-camera session was held,	
12	which is contained in Volume 34, pages 2531-2536 o	f
13	the transcript.)	
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

		Page 2519
1		
2	JUDGE WOODRUFF: We're back in	
3	regular session.	
4	Q. (BY MR. NELSON) Now, we can agree	
5	that Noranda is a U.S. producer of aluminum.	
6	A. That's correct.	
7	Q. And your markets are primarily in the	
8	U.S.	
9	A. Primarily.	
10	Q. And U.S macroeconomic factors can	
11	also have an impact on your price.	
12	A. That's correct.	
13	Q. And the factors that apply in the U.S	
14	and the factors that apply more globally, they	
15	don't always move in the same direction, do they?	
16	A. No, they don't.	
17	Q. And you're aware that all of these	
18	factors get put into the CRU forecast, right?	
19	A. I assume so.	
20	Q. They have a team of researchers	
21	that's looking at all of these different inputs and	
22	coming up with their best estimate, correct?	
23	A. I believe that would be the case.	
24	Q. And the internal consensus among your	
25	senior executives, they're not aware of anything	

Page 2520

- 1 that would say they have a better forecast for 2015
- or 2016 than CRU's forecast.
- 3 A. No, we don't have anything negative
- 4 to contradict that.
- 5 Q. Now, in your discussions with your
- 6 internal group you didn't even look out as far as
- 7 2018, correct?
- 8 A. No. We were looking at the near
- 9 term.
- 10 Q. And if you talk about 2017 you don't
- 11 recall what that suggestion was.
- 12 A. No, I don't.
- 13 Q. With respect to aluminum demand,
- 14 demand, you and I can agree that there's a positive
- outcome for demand in the markets Noranda serves?
- 16 A. Yes, there is.
- 17 Q. And that's true next year, correct?
- 18 A. I believe so.
- 19 Q. It's true over the next year after
- 20 that as well.
- 21 A. I'm not sure about the year after.
- 22 Q. Well, do you recall us discussing it
- 23 at your deposition?
- 24 A. I don't remember that particular
- 25 focus, no, on 2017.

Page 2521

- 1 Q. Well, let me ask the question a
- 2 little differently and see if maybe we can short
- 3 circuit this. You'd agree with me absent any
- 4 extraordinary events for the next year or two you
- 5 believe Noranda's demand outcome is positive.
- A. Yes, we believe we have a good
- 7 demand.
- 8 Q. And there's positive changes in the
- 9 aluminum market which either directly or indirectly
- 10 impact Noranda, correct?
- 11 A. Yes.
- 12 Q. For example Ford has announced that
- 13 they're going to all aluminum bodies on their
- 14 trucks which is going to increase demand for
- 15 aluminum, correct?
- 16 A. That's correct.
- 17 Q. Industries are switching from copper
- 18 wire to aluminum wire, that's driving demand,
- 19 correct?
- 20 A. That is a trend in the industry, yes.
- 21 Q. And you and I can agree that demand
- 22 conditions in the U.S are more favorable to stable
- or higher prices than conditions globally are,
- 24 correct?
- 25 A. They are favorable as one of the

Page 2522

- 1 components that affect prices.
- 2 Q. And they're more favorable than
- 3 global conditions?
- 4 A. I believe so but I'm not absolutely
- 5 sure there.
- 6 Q. As best you can tell as you sit here
- 7 today I just made a true statement.
- 8 A. Yes, best I know.
- 9 Q. In fact Noranda, you really have
- 10 pretty limited knowledge about global conditions
- 11 other than what you read from CRU, correct?
- 12 A. CRU and what we hear from customers
- 13 and other intelligence firms.
- 14 Q. But mainly CRU.
- 15 A. They would be one of the main ones,
- 16 yes.
- 17 Q. So use that term that Mr. Pratt used,
- 18 tight or tighter, you and I can agree that market
- 19 conditions in the U.S are tighter than they are
- 20 **globally**.
- 21 A. That was the forecast, yes. At that
- 22 particular time. But that's different after the
- 23 Merrill Lynch report that came out the other day,
- 24 last week.
- 25 Q. The Merrill Lynch report about China?

Page 2523

- 1 A. But it was talking about that, you
- 2 know, they were projecting a surplus rather than a
- 3 deficit.
- 4 Q. And has that changed CRU's
- 5 fundamental forecast?
- 6 A. I don't know yet if that has. I'm
- 7 not sure if it's been reflected in their most
- 8 recent report but the report that was reviewed
- 9 yesterday, yes, they did have a different opinion.
- 10 Q. I'm sorry, I asked about forecasts.
- 11 A. Okay.
- 12 O. CRU hasn't done a forecast since
- 13 January, correct?
- 14 A. I believe they did one in February.
- 15 Q. Do you have a copy of that forecast?
- 16 A. I do not.
- 17 Q. Okay. You haven't looked at it.
- 18 A. I have not.
- 19 Q. Because you're aware we've asked for
- 20 all CRU forecasts that you've got in your
- 21 possession, you know that, correct?
- 22 A. Yes. I believe that is copyright
- 23 material that we weren't allowed to provide.
- Q. You don't know of any credible source
- 25 that's saying that there's greater tightness in the

Page 2524

- U.S. that's expected to change over the next couple
- 2 of years, correct?
- 3 A. I'm sorry, is that statement from the
- 4 CRU forecast?
- 5 Q. Are you aware of any credible source,
- 6 you're not aware, let me rephrase the question.
- 7 You're not aware of any credible
- 8 source, a source you would consider credible
- 9 whether it's internally, whether it's CRU, whether
- 10 it's somebody else who says they expect a greater
- degree of tightness in the U.S market versus the
- 12 world market to change as we look over the next
- 13 several years. You're not aware of any such
- 14 statement by a credible source, correct?
- 15 A. I'm not aware of one at this point.
- 16 MR. NELSON: Your Honor I'm going to
- 17 mark four exhibits if I could ask the court for the
- 18 next four exhibit incomes.
- JUDGE WOODRUFF: We'll start at 69.
- 20 MR. NELSON: For the record I'm going
- 21 to mark Exhibit 69 is a document that has been
- 22 previously marked in deposition as Boyles Exhibit
- 23 3.
- JUDGE WOODRUFF: Okay.
- MR. NELSON: Then Your Honor I'm

Page 2525

- 1 going to mark as Exhibit 70 a document which has
- 2 previously been marked as Boyles Exhibit 4.
- 3 Your Honor I'd like to mark as
- 4 Exhibit 71 what has previously been identified as
- 5 Boyles Exhibit 5 in deposition.
- 6 And finally Exhibit 72 previously
- 7 marked in deposition as Boyles Exhibit 6.
- 8 Q. (BY MR. NELSON) You should now have
- 9 in front of you Boyles Exhibits 69, 70, 71 and 72,
- 10 sir.
- 11 A. Yes, I do.
- 12 O. You and I have looked at these
- documents before, correct?
- 14 A. I think we did.
- 15 Q. In your deposition, right?
- 16 A. I think we did, some of these.
- 17 Q. Let's see if we can identify them for
- 18 the record.
- 19 Exhibit 69 of course you and I can
- agree, can't we, that's an edited transcript of
- 21 Noranda's fourth quarter conference call with
- 22 analysts and investors?
- 23 A. That's what it appears to be, yes.
- Q. You spoke at that event.
- 25 A. Yes.

Page 2526

- 1 Q. And you heard, Mr. Smith was there
- with you, he spoke at that event, correct?
- 3 A. Yes. I think they had our comments
- 4 mixed up, but.
- 5 Q. I think Mr. Smith mentioned that.
- 6 But you talk at these events that somebody
- 7 transcribes it and then your folks take a look at
- 8 it, sounds like your investor folks and Mr. Smith
- 9 take a look at it and if they have any corrections
- 10 they call about those, correct?
- 11 A. That's correct.
- MR. NELSON: Your Honor at this point
- 13 I would move for the admission of Exhibit 69 into
- 14 evidence.
- JUDGE WOODRUFF: 69 has been offered,
- 16 any objection to its receipt?
- 17 MR. MALLIN: No objection, Your
- 18 Honor.
- JUDGE WOODRUFF: Hearing none it will
- 20 be received.
- Q. (BY MR. NELSON) Now when you do
- 22 these investor conference calls in addition to your
- 23 speaking part you also have some slides that you
- 24 show the investors and the analysts from Wall
- 25 Street, correct?

Page 2527

- 1 A. That's correct.
- Q. So let's take a look at Exhibit 70.
- 3 Exhibit 70 is the slide deck, the slides that you
- 4 showed investors along with that earnings call that
- 5 we talked about in Exhibit 69, correct?
- 6 A. I believe so, correct.
- 7 MR. NELSON: Move for the admission
- 8 of Exhibit 70 into evidence.
- 9 JUDGE WOODRUFF: 70 has been offered,
- 10 any objections to its receipt?
- MR. MALLIN: No objection, Your Honor.
- 12 JUDGE WOODRUFF: Hearing none it will
- 13 be received.
- 14 Q. (BY MR. NELSON) Now, you had a
- similar process for the third quarter of 2014,
- 16 after it was over and you'd gathered the results
- 17 through a call with Wall Street, somebody
- 18 transcribed it and you had some slides that went
- 19 along with your talk, correct?
- 20 A. That's correct.
- 21 Q. So let's look at Exhibit 71. Is that
- 22 the slide deck, the group of slides for your third
- 23 quarter conference call?
- A. (Reviewing document). I believe it
- 25 is.

Page 2528 1 Q. Okay. 2 MR. NELSON: Move for the admission 3 of Exhibit 71. 4 JUDGE WOODRUFF: 71 has been offered, 5 any objections to its receipt? 6 MR. MALLIN: No objections Your 7 Honor. 8 JUDGE WOODRUFF: Hearing none it will be received. 10 Q. (BY MR. NELSON) And then finally Exhibit 72, that's the transcript of what you and 11 12 Mr. Smith said and the questions that the analysts 13 from Wall Street asked on that third quarter conference call, correct? 14 15 Α. Yes, I believe it is. 16 MR. NELSON: Move for the admission 17 of Exhibit 72 into evidence. JUDGE WOODRUFF: 72 has been offered. 18 19 Any objections to its admittance? 20 MR. MALLIN: No, Your Honor. 21 JUDGE WOODRUFF: Hearing none it will 22 be received. 23 Q. (BY MR. NELSON) Now, we've talked 24 about, we've had, sometimes we've had to go highly confidential and come back out of confidential, 25

Page 2529

- 1 you've been there and seen that, correct?
- 2 A. Yes, I have.
- 3 Q. All right. We can agree that
- 4 anything you said in here is not highly
- 5 confidential, right?
- 6 A. That would be correct.
- 7 MR. MALLIN: Just for clarity, you're
- 8 talking about the transcripts.
- 9 MR. NELSON: I'm sorry, yes, what's
- 10 in the transcripts.
- 11 Q. (BY MR. NELSON) Exhibit 69.
- 12 A. Yes.
- 13 Q. This is what you were telling the
- 14 public.
- 15 A. That's correct.
- 16 Q. So let's look a little bit at some of
- 17 the things you were telling the public and let's
- 18 start by looking a little bit at demand. Let's
- 19 look at Exhibit 70 and if you could turn with me to
- 20 slide 4 please. And this is an analysis that you
- 21 put together for Wall Street talking about U.S
- 22 aluminum demand and in various kinds of markets,
- 23 correct?
- 24 A. Yes, based on CRU forecasts.
- 25 Q. And you wouldn't have put CRU's

Page 2530

- 1 numbers in there if you weren't willing to
- 2 basically support them, correct?
- 3 A. That's correct.
- 4 Q. If you thought CRU was dead wrong you
- 5 wouldn't have put it in this document for
- 6 investors.
- 7 A. No, I wouldn't.
- 8 Q. So you're telling investors the
- 9 building and construction market four to seven
- 10 percent growth in demand projected, correct?
- 11 MR. MALLIN: I'm sorry Counsel,
- 12 you're on page 4?
- MR. NELSON: I'm on slide 4.
- MR. MALLIN: I apologize.
- MR. NELSON: I was on slide 4 of
- 16 Exhibit 70.
- 17 MR. MALLIN: My only concern is just
- 18 so that you're clear if you're going to be asking
- 19 questions about the slides that are not reflected
- 20 in the transcripts you may in fact be going into HC
- 21 areas. If you're asking for some further
- 22 interpretation of what the slides say or don't say
- 23 we'll just have to be careful I guess is what I'm
- 24 trying to tell you up front.
- MR. NELSON: Well, I would welcome

Page 2531

- 1 counsel any time, I certainly don't mean to step on
- 2 your highly confidential so please feel free
- 3 anybody to interrupt me. Okay?
- 4 MR. MALLIN: I just wanted to alert
- 5 you.
- 6 Q. (BY MR. NELSON) Building
- 7 construction, you were telling investors U.S demand
- 8 rose on the outlook of four to seven percent,
- 9 right?
- 10 A. What we did was provide what the CRU
- 11 forecast was, yes.
- 12 Q. Okay. And you don't have any reason
- 13 to disagree with that.
- A. No, I don't.
- 15 Q. And that's good positive growth in
- 16 U.S demand in that market.
- 17 A. It is and that has brought sectors,
- 18 we don't participate in all portions of those
- 19 sectors.
- 20 Q. No. But overall if somebody takes
- 21 aluminum and uses it to make windows even if you
- 22 don't make windows that still helps your demand
- 23 because somebody else is going to have to take your
- 24 aluminum, correct?
- 25 A. Yes. It's possible, yes.

Page 2532 1 Q. And likewise in the electrical market 2 positive growth four to six percent, that's what you put forward? 3 Α. Yes. 4 5 Same thing in consumer durables, Q. three to seven percent growth, that's pretty 6 7 healthy isn't it? 8 Α. Yes. 9 Q. Transportation, eight to 11 percent growth, that's outstanding, isn't it? 10 11 Α. Yes. 12 Q. And then the worst of the bunch is 13 simply flat demand in foil and packaging, fair? 14 That's what it says, yes. Α. 15 Q. In fact you told investors that strong demand provides opportunities to grow with 16 17 our current customers and to follow the spread of aluminum into new applications, correct? 18 19 Α. That's correct. 20 And you certainly didn't suggest to Q. 21 investors that markets, any markets where Noranda's demand would decline, did you? 22 23 No, we did not. Α.

I'm sorry, Trial Exhibit 69. If we go to page 3.

And if we look at Boyles Exhibit 3,

Fax: 314.644.1334

Q.

24

25

Page 2533

- 1 Page 3 is some comments by Mr. Smith, your CEO,
- 2 correct?
- 3 A. This is faded out. Okay. I think I
- 4 have it now. Which particular paragraph?
- 5 Q. I'm trying to find it myself, sir.
- 6 If you look down -- here, let me just put it up on
- 7 the board.
- 8 Do you see the paragraph that begins
- 9 with slide 4? It's about a little over halfway
- 10 down the page?
- 11 A. Yes, I do.
- 12 Q. Okay. And Mr. Smith says here slide
- 13 4 summarizes what we feel is favorable growth
- 14 outlook for a primary aluminum consumption in the
- 15 United States. You see that?
- 16 A. Yes.
- 17 Q. Besides driving our own order book we
- 18 believe strong demand is the key fundamental driver
- 19 of sustainability in aluminum prices over the
- 20 medium and long term.
- 21 Did I read that correctly?
- 22 A. Yes, you did.
- 23 Q. And when Mr. Smith was talking about
- 24 driving our own order book he meant that strong
- demand was going to help Noranda's orders, correct?

Page 2534

- 1 A. Yes.
- 2 O. And when he talks about
- 3 sustainability in aluminum prices over the median
- 4 to long term he's talking about prices that are at
- 5 least stable to positive, correct?
- A. I don't know exactly what he meant
- 7 but I would assume that based on the comment, yes.
- 8 Q. Now going back to your scenarios we
- 9 can agree that your scenarios do not show
- 10 sustainable all-in prices over the medium and long
- 11 term, do they?
- 12 A. I would disagree, this only talks
- 13 about the consumption side so you have to factor in
- 14 the supply side on the all-in on aluminum prices.
- 15 Q. You and I got together, what, a week
- and a half, two weeks ago and took your deposition?
- 17 A. Approximately, yes.
- 18 MR. NELSON: Approach the witness
- 19 Your Honor.
- JUDGE WOODRUFF: You may.
- Q. (BY MR. NELSON) I'm going to hand
- 22 you a copy of your deposition. Could you confirm
- 23 that please?
- A. (Reviewing document). Yes, looks
- 25 like a copy of it.

Page 2535
Q. You were under oath, a court reporter

- 2 there, took it all down, correct?
- 3 A. Yes.

1

- 4 Q. If you look at page 137 of your
- 5 deposition. If you want to flip back to the prior
- 6 page you see we were talking about Mr. Smith's use
- 7 of the word sustainable and then we asked some
- 8 questions and answers, okay?
- 9 A. Okay. Let me find it first.
- 10 (Reviewing document).
- 11 Yes, okay. I follow.
- 12 Q. So I pointed out Mr. Smith said that
- 13 there's going to be sustainable prices in the
- 14 medium to long term and then I asked you the
- 15 following question: With respect to your '98, '99
- and 2000 scenarios, and Counsel I'm starting at
- 17 line 16, do these reflect sustainable all-in prices
- 18 over the medium and long term?
- 19 Did I read the question correctly?
- 20 A. Is that on 136?
- 21 Q. 137, sir.
- 22 A. Sorry.
- Q. I'm setting things up. You and I can
- 24 agree that --
- 25 A. Sorry, I was a little slow.

Page 2536 1 Q. That's okay. 2 You and I can agree that on pages 136 3 and 137 we're talking about Mr. Smith using the word sustainable for all-in prices when he's 5 talking to investors, correct? 6 Α. Yes. 7 And then we turn and we look at your 8 '98, '99 and 2000 scenarios, that's some questions on 137, correct? 10 Α. Yes. 11 And then I asked you do these, Q. 12 meaning your '98, '99 and 2000 scenarios, do these 13 reflect sustainable all-in prices over the medium 14 and long term? 15 Do you see that question? 16 Α. Yes. In those models, yes. 17 Q. Let me try my question again just to stick to that. Did I ask you the following 18 question: Do those reflect sustainable all-in 19 20 prices over the medium and long term? 21 Α. Again where is that question? 22 Q. Start at line 16, page 137. Okay. I'm sorry. 23 24 So again do those, meaning the '98, Q. 25 '99 and 2000 scenarios, do they reflect sustainable

Page 2537 long-term prices over the medium and long term, did 2 I ask you that question? 3 Α. Yes, you did. 4 Q. And the answer you gave was no, 5 they're not all sustainable, correct? 6 Α. Yes. And referring to --7 I'm sorry, sir, I just want to make Q. 8 sure we're clear. Did I read your answer correctly? 10 You read it correctly but maybe not in the context of my answer. 11 12 You and I can agree the global Q. 13 economy is becoming more aluminum intensive? 14 Α. Yes, I believe so. 15 You have stable demand for your Q. 16 products. 17 Α. Yes, we do. 18 And your local supply and demand Q. 19 fundamentals are positive? 20 Α. We believe so, yes. 21 Ο. Now let's talk a little bit about 22 your enterprise model and I want to start with 23 looking at a document that was in the opening 24 statement, I believe it's now been labeled as --25 MR. DOWNEY: 532.

		Page 2538
1	MR. NELSON: The chart?	
2	MR. DOWNEY: The graph?	
3	MR. NELSON: Yes, the graph.	
4	MR. MALLIN: If you're going to ask	
5	questions about this we're going to have to go into	
6	HC.	
7	MR. NELSON: That's fine, I'm going	
8	to ask one or two.	
9	JUDGE WOODRUFF: We'll go in-camera.	
10		
11	(REPORTER'S NOTE: An in-camera session was held,	
12	which is contained in Volume 34, pages 2556-2558 of	
13	the transcript.)	
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

		Page 2539	
1			
2	JUDGE WOODRUFF: And we're back in		
3	regular session.		
4	Q. (BY MR. NELSON) Now, let's talk		
5	about smelter closure. There's been a fair amount		
6	of discussion about smelter closure here in this		
7	room. You've heard it, correct?		
8	A. Yes.		
9	Q. In fact you have managed capital		
10	spending in the past when you needed to to manage		
11	your liquidity, correct?		
12	A. Yes, it's one of the letters that we		
13	use, yes.		
14	Q. In fact you, for example you slowed		
15	capital spending for a period of time on the rod		
16	mill to manage cash.		
17	A. That's correct.		
18	Q. Now in your enterprise model to get		
19	the liquidity assumptions you gave this Commission		
20	you made an assumption that Noranda for every year		
21	in your model		
22	MR. MALLIN: Before you ask the		
23	question I think we're going to have to go HC		
24	because that number is highly confidential.		
25	MR. NELSON: Okay.		

		Page 2540
1	JUDGE WOODRUFF: Back in HC.	
2	(REPORTER'S NOTE: An in-camera session was held,	
3	which is contained in Volume 34, pages 2560-2584 of	
4	the transcript.)	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Page 2541 1 2 Q. (BY MR. NELSON) If you can go to 3 Exhibit 70. 4 MR. NELSON: And I won't read this 5 into the record Counsel so I'll just point to the 6 answer then we don't have to go back to highly 7 confidential. Right at the top, Exhibit 70, slide 8 15, the very last slide. 10 Α. Okay. 11 If you read that, just read it to Q. 12 yourself, under the key take-a-ways, the sort of 13 central bullet point right at the top, again that's another repetition of that positive message about 14 15 the company future, fair? 16 Yes, that we were trying to return Α. 17 the smelter to full production, yes, which will 18 have a positive impact. 19 Now, for 2014 you earned a positive Q. 20 what, \$.14 per share? 21 Α. Excluding special items, yes, that's 22 correct. 23 And that was compared to a \$.15 per Q. share loss in 2013? 24

Fax: 314.644.1334

I believe that's correct.

Α.

25

Page 2542 1 Q. We've been talking a lot about trend 2 lines, that's a positive trend line isn't it? 3 It is. Aluminum prices were up. And you've done that with existing 4 Q. 5 power rates, correct? 6 Α. Yes, that's correct. 7 And for that matter when you paid off 8 your line at the end of the third quarter that was with the existing power rates, right? 10 Α. That's correct. 11 When you paid it off, your credit Q. 12 card, your line off at the end of the fourth 13 quarter that was with existing power rates, 14 correct? 15 Α. Yes. 16 MR. NELSON: Thank you, Your Honor, I 17 have nothing further. 18 JUDGE WOODRUFF: Okay. Open for 19 questions from the bench. 20 Mr. Chairman? EXAMINATION 21 22 QUESTIONS BY CHAIRMAN KENNEY: 23 Q. Good morning Mr. Boyles. 24 Α. Good morning. 25 Q. How are you?

Page 2543 1 So I can talk about the liquidity as 2 long as I don't mention the number, right? 3 Α. I believe that's correct. Without going in-camera. Is that 4 Q. 5 right? 6 MR. NELSON: I would say that that's 7 right generally Judge, Commissioner, I'm sorry. CHAIRMAN KENNEY: That's fine. 8 Either one is fine. 9 10 If we're going to talk about trends Α. or anything like that we may want to go in-camera. 11 12 Q. (BY CHAIRMAN KENNEY) Yeah, I just 13 want to ask a question that I think was being raised, that -- actually let's do go In camera 14 15 because I want to talk about the specific numbers. 16 JUDGE WOODRUFF: Okay. Then we'll go back in-camera. 17 18 19 (REPORTER'S NOTE: An in-camera session was held, 20 which is contained in Volume 34, pages 2587-2590 of 21 the transcript.) 22 23 2.4 25

Page 2544

Fax: 314.644.1334

1

- 2 Q. (BY MR. CHAIRMAN) So then thereafter
- 3 comparison of the slides from the opening statement
- 4 to the transcripts of the fourth quarter earnings
- 5 calls, do you remember that line of questioning?
- A. Yes, sir.
- 7
  Q. Here's the question that didn't get
- 8 asked again, I'm not, I don't have to worry about
- 9 these things.
- 10 Is it, would you agree or disagree
- 11 with me that the picture that Noranda presents to
- 12 its investors on earning calls is that starkly
- 13 different and rosier than the picture that you all
- 14 present to us here in the hearing room, in this
- 15 case? You weren't around in the last case, but.
- 16 It's the same issue I think we had in the last
- 17 case, the picture that you guys present on the
- 18 earnings calls is different than the picture you
- 19 present here in the hearing room. Is that a fair
- 20 characterization?
- 21 A. I don't think so.
- Q. Tell me why not.
- A. We're fully transparent with what can
- 24 happen and we disclose that in our risk factors and
- 25 in our earnings call we talk about the improvements

Page 2545

- 1 quarter over quarter where we do make improvements
- 2 where we're making decisions to do everything
- 3 possible to keep the smelter open and that's what
- 4 we've represented here. What we've presented in my
- 5 testimony is the likely outcomes without a power
- 6 relief. You know, here's where we will go. We may
- 7 not be there today but I can't wait to step out in
- 8 front of the train before I come to the Commission
- 9 and ask for rate relief.
- 10 Q. I mean in the testimony in here
- 11 Noranda makes definitive statements that if this
- 12 Commission doesn't provide the rate relief it's
- 13 requesting these other consequences will definitely
- 14 occur. That's what I was presented here. But then
- 15 when I read the transcripts of the earnings calls
- 16 it's a much more measured tone, and I think that
- you just said it yourself, these are risk factors
- 18 of what may occur, not what definitely will occur.
- 19 How do you explain what is to me a cognitive
- 20 dissidence between what you're telling us and what
- 21 you're telling investors?
- 22 A. Well, I believe what we've prepared
- 23 is the scenarios of the likely outcomes. We don't
- 24 typically share those with third parties, we --
- 25 Q. Stop there for a minute just so I can

Page 2546

- 1 understand that component.
- 2 So you disclose the risk factors to
- 3 the investors but you don't necessarily provide
- 4 them the conclusions or the consequences of those
- 5 risk factors.
- 6 A. No, I think we have in our previous
- 7 earnings calls where we did talk about, you know, a
- 8 sustainable power rate that we need to keep the
- 9 smelter open and we've talked about it in earnings
- 10 calls, in our decs, in our 10Qs and 10K so we have
- 11 discussed those things openly with investors. So
- 12 if we went back to prior scripts of transcripts of
- 13 calls there would be lots of discussion around
- 14 closure of the smelter.
- 15 Q. Okay. Thanks for your time.
- 16 A. Thank you.
- 17 JUDGE WOODRUFF: Commissioner Hall?
- 18 COMMISSIONER HALL: Yes.
- 19 EXAMINATION
- 20 QUESTIONS BY COMMISSIONER HALL:
- Q. Good morning.
- 22 A. Good morning.
- 23 Q. I had a number of questions along the
- 24 same line from the Chairman and I'm going to, I
- 25 think it is without a doubt fact that there is a

Page 2547

- 1 difference between what you are telling investors
- 2 and what you are telling us here today. Now, I'm
- 3 not telling you that it is my belief that there is
- 4 not a way to find some consistency but the
- 5 verbiage, the definitive nature is different
- 6 between the two and what I'm asking for you, from
- you, is to explain to me why there might be that
- 8 discrepancy. Now, you can say there's no
- 9 discrepancy, I'm telling you I don't believe that.
- 10 There is a difference. Now how can you explain
- 11 that difference?
- 12 A. Well, we may not use the exact same
- 13 words --
- 14 Q. Why?
- 15 A. Well, I may not remember the exact
- 16 same words the next time I talk about it but in the
- 17 same context we do talk about and we have talked
- 18 about closure of the smelter being a possibility.
- 19 I think we used the words a substantial likelihood
- 20 if we didn't get power rate relief so we have
- 21 discussed those things in our earnings calls, those
- 22 transcripts were presented here, but we have made
- 23 those disclosures in the past and again we're not
- 24 predicting absolute closure.
- 25 Q. But you are here. That is what you

Page 2548

Fax: 314.644.1334

- 1 are predicting here. Absent rate relief you're
- 2 telling us closure. You are not telling investors
- 3 absent rate relief, closure.
- 4 A. I think we are, we are in our risk
- 5 factor that was talked about earlier. We talk
- 6 about rate relief, we talk about how that is
- 7 dependent upon keeping that smelter open or not. I
- 8 think we use curtail the facility which is both a
- 9 shutting of lines as well as closure of the
- 10 facility.
- 11 Q. Okay. Let me try a different tact.
- 12 What would happen if you as a company took the
- 13 highly confidential statements that are in the
- 14 record in this case and put them open to public
- 15 disclosure?
- MR. MALLIN: Well, Your Honor the
- 17 answer to that question in itself is HC.
- 18 A. Yes.
- 19 COMMISSIONER HALL: Okay. Well let's
- 20 go HC.
- 21
- 22 (REPORTER'S NOTE: An in-camera session was held,
- which is contained in Volume 34, pages 2595-2621 of
- 24 the transcript.)

25

		Page 2549
1		
2	JUDGE WOODRUFF: We're back in the general	
3	session and it's time to announce lunch break which	
4	I see smiles in the audience for that. We have	
5	agenda today at 12:30 so we'll come back at 1:30.	
6	(Whereupon, a lunch recess was taken)	
7	JUDGE WOODRUFF: Let's come to order	
8	please. We're back from lunch and Mr. Chairman you	
9	had a question you wanted ask counsel before we get	
10	started.	
11	CHAIRMAN KENNEY: This is for the	
12	attorneys. So last week we settled, or we noted	
13	that issue 22 was settled which is the low income	
14	exemption from MEEIA.	
15	Is that correct? Let's begin there.	
16	MS. TATRO: Yes.	
17	CHAIRMAN KENNEY: And I asked Mr.	
18	Allison about \$.08 versus \$.11, is that right?	
19	MR. ALLISON: Yes.	
20	CHAIRMAN KENNEY: It's all allocated	
21	to the residential consumers.	
22	MR. ALLISON: Correct.	
23	CHAIRMAN KENNEY: In which	
24	stipulation and agreement will that appear?	
25	MS. TATRO: That is the one I have	

Page 2550 not drafted yet because I frankly forgot. 2 CHAIRMAN KENNEY: That's not a 3 problem, I just wanted to make sure I hadn't missed it somewhere else. 4 5 MS. TATRO: It's that issue and there's one other minor issue that had to be put in 7 with that stuff, I can't remember off the top of my head. 8 9 CHAIRMAN KENNEY: That's fine. 10 MS. TATRO: We do owe you that. 11 MR. THOMPSON: LED lighting? 12 MS. TATRO: Yes. CHAIRMAN KENNEY: Yes. 13 14 MS. TATRO: So that will be on a stip 15 that I'll probably work on this afternoon. 16 CHAIRMAN KENNEY: And then you all 17 filed an amended nonunanimous stipulation regarding certain revenue requirements and you corrected the 18 language that I asked you all to correct. 19 20 MS. TATRO: Yes, I made an attempt to 21 make all those corrections that I believe you pointed out. 22 23 CHAIRMAN KENNEY: And I believe it 24 was. 25 MS. TATRO: Thank you.

Page 2551 1 CHAIRMAN KENNEY: So back to the low 2 income MEEIA exemption, it hasn't been reduced to 3 writing and that was one that all the parties had agreed upon, right? 4 5 MS. TATRO: Right. 6 CHAIRMAN KENNEY: Why does it appear 7 in the Nonunanimous Stipulation and Agreement Regarding Economic Development, Class Cost of 8 9 Service, Revenue Allocation and Rate Design that the consumer parties have agreed to? 10 MR. ALLISON: Because it hasn't been 11 12 filed yet and because it was dealing with rate 13 design, class cost of service. It was in that package of issues that had not come in front of the 14 15 Commission yet. 16 CHAIRMAN KENNEY: But Ameren's not a 17 signatory to this. 18 MR. ALLISON: They are not and I don't see that being necessarily preclusive of any 19 separate document that we would need, I think the 20 21 terms in there are mutually coexistent to what, a much more narrow document I think that Ameren would 22 23 want to file. 24 CHAIRMAN KENNEY: I was just confused because that was an issue around which all the 25

Page 2552 parties agreed, there is not a stipulation around 2 which all parties agreed. 3 MR. ALLISON: That is exactly right. CHAIRMAN KENNEY: It struck me as out 4 5 of place. 6 MR. ALLISON: It was in that package, 7 in developing that stipulation it was in the package of issues regarding rate design class cost 8 of service and all of those issues that we are trying to put in one document. 10 CHAIRMAN KENNEY: Were you guys aware 11 12 that it was in here? MS. TATRO: Since I wasn't aware of 13 that stipulation until after it was filed, no. 14 do also find it odd but I don't think it's fatal. 15 16 CHAIRMAN KENNEY: Thanks. That's all 17 I wanted to know. JUDGE WOODRUFF: Then we're back for 18 the witnesses and we had just completed questions 19 from the bench from Mr. Boyle. Is there anyone 20 21 wishes to recross? 22 I assume Ameren that Staff wanted to 23 go first. 24 MR. THOMPSON: Thank you. 25

		Page 2553
1		
2	CROSS EXAMINATION	
3	QUESTIONS BY MR. THOMPSON:	
4	Q. Good afternoon Mr. Boyle.	
5	A. Good afternoon.	
6	Q. The Chairman and Commissioner Hall	
7	both asked you questions about liquidity and there	
8	were questions about what would happen if your	
9	liquidity was reduced beyond a critical point. Do	
10	you recall that?	
11	A. Yes, I do.	
12	MR. THOMPSON: And I don't know	
13	whether this needs to be In camera or not.	
14	MR. MALLIN: Well, since I don't know	
15	your question I'm going to have to assume yes.	
16	Maybe after you ask your question I can say no.	
17	JUDGE WOODRUFF: We'll go in-camera	
18	at this point.	
19	(REPORTER'S NOTE: An in-camera session was held,	
20	which is contained in Volume 34, pages 2626 to 2629	
21	of the transcript.)	
22		
23		
24		
25		

	Page 2554
1	
2	MR. NELSON: Your Honor I would ask
3	the Court to take judicial notice, there was some
4	questions about the level of dividends, I think
5	that was covered in case EC-2014-0024 in Exhibits
6	115 and Exhibit 116 which were the 10Ks for 2013
7	and 2012 and I believe that that, those documents
8	would have evidence that supplements what the
9	witness was able to do in terms of dividends paid
10	and I would ask the court to take judicial notice
11	of those.
12	JUDGE WOODRUFF: Any objection?
13	MR. MALLIN: As long as they're a
14	public filing I don't have a problem.
15	JUDGE WOODRUFF: It will be a filing
16	in the prior case.
17	MR. LOWERY: They're already in
18	evidence in the last case Judge, they're portions
19	of their 10Ks for those two years.
20	JUDGE WOODRUFF: And I'll assume you
21	will cite to them in your briefs.
22	MR. MALLIN: Which years?
23	MR. LOWERY: '12 and '13. Exhibits
24	115 and 116 from the last case.
25	MR. MALLIN: Got it.

Page 2555 1 MR. NELSON: Nothing further. 2 JUDGE WOODRUFF: All right. 3 Redirect? 4 MR. MALLIN: Yes, Your Honor. Thank 5 you. 6 REDIRECT EXAMINATION 7 QUESTIONS BY MR. MALLIN: 8 Q. Let's talk first a little bit about 9 the AVL, the revolver or the credit card. In 10 calendar year 2014 for what uses or purposes did 11 Noranda use those things? 12 We used it for various purposes to 13 fund normal operating expenses such as payroll, our power bill, our natural gas bills, those type of 14 15 expenses. We also had unusual operational disruptions that required additional cash as much 16 17 as I disclosed earlier around the weather impact in 2014 as well as another weather impact that shut 18 down our power facility for a day and a half. 19 Those are examples. 20 21 Is it accurate to say that it was 22 used for day-to-day operations at Noranda? 23 Yes it is, during the month. Α. MR. MALLIN: We're going to have to 2.4 go HC at this point Your, Honor. 25

		Page 2556
1	JUDGE WOODRUFF: We are back In	
2	camera.	
3		
4	(REPORTER'S NOTE: An in-camera session was held,	
5	which is contained in Volume 34, page 2632 of the	
6	transcript.)	
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

		Page 2557	
1			
2	Q. (BY MR. MALLIN) Let's talk a little		
3	bit about capital expenditures. In 2012 how much		
4	did Noranda spend on capital expenses or		
5	expenditures?		
6	A. That's in my 10K, I believe it was		
7	approximately 88 million.		
8	Q. How about in 2013?		
9	A. Approximately 73 million.		
10	Q. And in 2014?		
11	A. Approximately 94 million.		
12	Q. You indicated earlier or identified a		
13	piece of equipment called a carbon baked furnace?		
14	A. Yes.		
15	Q. What does that do?		
16	A. Those are the furnaces that are used		
17	to take carbon and make anodes using the aluminum		
18	making process. Those furnaces have a life that		
19	you have to rebuild those furnaces and they're very		
20	expensive, they could range up to approximately \$30		
21	million to refurbish those furnaces and we have		
22	three that are well beyond their normal life.		
23	Q. So there's a total of three of such		
24	furnaces down at New Madrid today?		
25	A. That's correct.		

			Page 2558
1	Q.	And all three of them are operating?	
2	Α.	Yes.	
3	Q.	You also mentioned a pot.	
4	Α.	Yes.	
5	Q.	Approximately how much does it cost	
6	to refurbish,	repair or replace a pot?	
7	Α.	It ranges from approximately \$170,000	
8	to \$200,000 p	er pot.	
9	Q.	As compared to a line of pots, how	
10	many are in a	line of pots?	
11	Α.	Our first two lines are approximately	
12	174 pots apiece, line 3 which is a different		
13	technology, l	arger pots, approximately 162.	
14		MR. MALLIN: Your Honor, this is HC	
15	at this point		
16		JUDGE WOODRUFF: All right. We'll go	
17	back in.		
18	(REPORTER'S NOTE: An in-camera session was held,		
19	which is contained in Volume 34, pages 2634-2635 of		
20	the transcrip	t.)	
21			
22			
23			
24			
25			

Page 2559 1 2 MR. MALLIN: Sorry jumping around, 3 I'm trying to do it topically. I apologize. JUDGE WOODRUFF: We're back to 4 5 general session. 6 (BY MR. MALLIN) Do you have before Ο. 7 you the slides used during the earnings call for 8 the third quarter of 2014 and the fourth quarter of 2014? I believe that they are Exhibits 70 and 71. 10 Α. Yes. Let's start with first from the third 11 Q. 12 quarter of 2014. Do you have that? 13 Α. Yes. 14 Q. Page 2 of the slides did Noranda 15 provide all participants and anyone who wished to read or view these slides information with regard 16 17 to how they should be considering any forward looking statements? 18 19 Yes, we did. Α. And what in general were you telling 20 21 those who attended the call or chose to look at these slides they should be considering when any 22 23 forward looking statements were being made? 2.4 Α. Well, that they could consider these forward looking statements are about future, not 25

Page 2560

- 1 past events and while certain important risks and
- 2 uncertainties any of which could cause a company's
- 3 actual results to differ materially from those
- 4 expressed in the forward looking statements.
- 5 Q. There were certain risks that were
- 6 identified as part of this third quarter 2014 call,
- 7 were there not?
- 8 A. Yes.
- Q. Can you give me a list of those?
- 10 A. Yes. We typically review our core
- 11 product activity program which is on page 7 of that
- 12 dec.
- 13 Q. Mr. Boyles I'm still on page 2,
- 14 forward looking statements?
- 15 A. I'm sorry, you're talking the forward
- 16 looking statements.
- 17 Q. Maybe I'm wrong, tell me if I'm right
- 18 or wrong here. Did the company, did Noranda, for
- 19 anyone who wished to participate or review these
- 20 slides tell those look, there are certain risks
- 21 that you ought to be aware of with regard to
- 22 forward looking statements?
- 23 A. Yes, we did.
- 24 Q. Was one of those the cyclical nature
- of the aluminum industry?

Page 2561

- 1 A. I believe it's on this page, I can't
- 2 pick it up right off the top.
- 3 Q. I'm looking down at the fifth line,
- 4 sir, if that helps you.
- 5 A. Yes.
- 6 O. What other risks or information were
- 7 being provided to anyone who was listening in with
- 8 regard to forward looking statements?
- 9 A. A downturn in general economic
- 10 conditions including changes in interest rates as
- 11 well as a downturn in the end use markets for
- 12 certain of the company products. Fluctuations in
- 13 the relative cost of certain raw materials and
- 14 energy compared to the price of primary aluminum
- 15 and aluminum rolled products.
- 16 Q. Anything else?
- 17 A. The effects of competition in
- 18 Noranda's business lines, Noranda's ability to
- 19 retain customers, a substantial number of which do
- 20 not have long term contractual arrangements with
- 21 the company. The ability to fulfill business,
- 22 business's substantial capital investment needs,
- 23 labor relations, i.e. disruptions, strikes or work
- 24 stoppages and labor costs, unexpected issues
- 25 arising in connection with Noranda's operations

Page 2562

- 1 outside of the United States, the ability to retain
- 2 key management personnel and Noranda's expectations
- 3 with respect to the acquisition, activity or
- 4 difficulties encountered in connection with
- 5 acquisitions, dispositions or similar transactions.
- 6 Q. Did Noranda as part of this third
- 7 quarter 2014 conference call also tell anyone who
- 8 was participating or viewing these slides that it
- 9 should go look to Noranda's 10K and its quarterly
- 10 reports?
- 11 A. Yes, we did.
- 12 Q. And for what reason or purpose did it
- 13 do so?
- 14 A. To look at the risk factors and the
- 15 disclosures in our 10K.
- 16 Q. Now, in the third quarter of 2014,
- 17 this dec, was there certain underlying assumptions
- 18 with regard to how Noranda may perform going
- 19 forward into the fourth quarter?
- A. That's correct.
- 21 Q. And are they found somewhere in this
- 22 **dec?**
- 23 A. Yes, on slide 7.
- Q. I'm on slide 7 that says productivity
- 25 compliments growth in creating value. Am I in the

Page 2563 right place? 2 Α. Yes. 3 Q. Okay. What on this page tells me what the assumptions were with regard to how well 4 5 or not Noranda might perform in the fourth quarter? 6 Α. Well, this gives an update on the 7 step change and our cost structure that we talked 8 about and the \$85 million improvement in our segment profit from 2014 to 2016 and we bridge 10 that --11 Hold on a second, you've got me all Q. 12 confused. 13 Α. Okay. 14 Q. What's a step change? 15 Meaning an increased level, a step Α. 16 change being it could be an increase or decrease in 17 your run rate. 18 Q. And what do you mean by run rate? 19 Your historical profitability. Α. 20 Okay. And was one of these steps Q. 21 with regard to power? 22 Α. Yes. 23 Q. What is this telling me with regard to the step change with regard to power? 24 25 We had included the expectation of Α.

Page 2564

- 1 obtaining rate relief and achieving these
- 2 objectives of 50 million.
- 3 Q. So that was one of the assumptions
- 4 with regard to productivity -- you called it
- 5 segment profit?
- 6 A. Yeah, or profitability.
- 7 Q. So an assumption to that
- 8 profitability was how much in rate relief?
- 9 A. 50 million.
- 10 Q. From the Public Service Commission.
- 11 A. That's correct.
- 12 Q. Now, with regard to the earnings call
- 13 associated with this particular dec, that's Exhibit
- No. 72. Do you have that before you, sir?
- 15 A. Yes, I do.
- 16 Q. The questions and answers here are
- 17 related to the dec we were just looking at, is that
- 18 correct?
- 19 A. That's correct.
- 20 Q. And the statements that you made and
- 21 Mr. Smith made, did they all assume this \$50
- 22 million of power savings?
- 23 A. Yes, they did.
- 24 Q. Did anyone on that call ask either
- 25 you or Mr. Smith I want you to assume for a second

Page 2565

- 1 that you don't get \$50 million in power savings,
- what's going to happen to the smelter?
- 3 A. No. No one did.
- 4 Q. Did anyone ask you on the call if you
- 5 don't get \$50 million worth of power savings what's
- 6 going to happen with the company?
- 7 A. No, I don't think they did.
- 8 Q. Anyone ask you what's going to happen
- 9 to its liquidity?
- 10 A. No.
- 11 Q. To its cash flow?
- 12 A. No.
- 13 Q. Let's talk about the slides now from
- 14 the fourth quarter of 2014. Do you have those
- 15 before you?
- 16 A. Yes, I do.
- 17 Q. This is Exhibit 70, am I correct?
- 18 A. Yes.
- 19 Q. Is there a similar statement with
- 20 regard to forward looking statements to anyone who
- 21 participated on that call or chose to view these
- 22 slides?
- 23 A. Yes, it is, on page 2.
- Q. I'm not going to have you go through
- 25 this list again but are the same risk factors

Page 2566

- 1 identified here again for anyone who was
- 2 participating on that call?
- 3 A. I believe they are.
- 4 Q. And they are found on page 2?
- 5 A. That's correct.
- 6 Q. And again is there a similar
- 7 paragraph indicating to anyone viewing these slides
- 8 or participating in the call that he or she should
- 9 go to the 10K and other quarterly reports filed by
- 10 Noranda?
- 11 A. Yes.
- 12 Q. For what purpose?
- 13 A. For discussion of additional risks
- 14 and uncertainties that may affect the future
- 15 results of Noranda.
- 16 Q. Like the third quarter slides was
- 17 there any underlying assumptions with regard to
- 18 power rate as part of this fourth quarter
- 19 conference call?
- 20 A. Yes. We had a similar update.
- Q. Is it on one of the pages in this
- 22 **dec?**
- 23 A. Page 7.
- 24 Q. I'm on page 7, it's entitled Progress
- 25 On Transformational Pack. You see that?

Page 2567 1 Α. Yes. 2 Which of those particular items here Q. 3 pertain to the power rate? Α. The second item where you see in the 4 5 left hand bubble New Madrid electricity rate reduction, \$40 million per year. Even at impact. 6 7 So what information was being 8 conveyed in this slide to anyone participating in this call or viewing these slides? 10 That included in our transformation Α. of our cost structure the productivity improvements 11 that we include in that \$85 million that getting 12 13 rate relief was a key component of that \$85 14 million. 15 In the amount of \$40 million per year Q. in terms of the EBITDA impact. 16 17 Α. That's correct. 18 Now let's turn to the transcript from Q. 19 that call, that's Exhibit No. 69? 20 Α. Okay. 21

Fax: 314.644.1334

made in that call as well as the questions posed

and the answers provided was this particular item

Do you have that before you?

In the statements that were being

Yes, I do.

22

23

24

25

Q.

Α.

Q.

Page 2568

- with regard to \$40 million per year in energy cost
- 2 savings the underlying assumption to what was
- 3 provided to those participating?
- 4 A. Yes, it was.
- 5 Q. Did anyone in this call in the fourth
- 6 quarter of 2014 ask the question what would happen
- 7 if Noranda did not, Noranda did not get a \$40
- 8 million per year power rate reduction?
- 9 A. I don't believe so.
- 10 Q. Did anyone ask what would happen to
- 11 the plant, to the smelter if there wasn't a \$40
- 12 million reduction in power rate?
- 13 A. No, I don't think so.
- 14 Q. Did anyone ask what would happen to
- 15 Noranda's liquidity in that situation?
- 16 A. No.
- 17 Q. Did anyone ask what would happen to
- 18 its cash flow in that situation?
- 19 A. No.
- 20 Q. You were in the courtroom, the
- 21 hearing room earlier when Mr. Smith identified the
- 22 10K that was filed with regard to December 31, 2014
- on behalf of Noranda, is that correct?
- 24 A. Yes.
- 25 Q. You were asked questions about it

Page 2569 1 earlier? 2 Α. That's correct. 3 Ο. And the risk factors that are found in there address both the smelter itself as well as 5 the rod mill, is that correct? 6 Α. That's correct. 7 Were you part of the decision making Q. 8 group that decided those had to be included? Α. 9 Yes. 10 MR. MALLIN: This part does need to go HC, Your Honor. 11 12 JUDGE WOODRUFF: All right. 13 MR. LOWERY: I just wanted to alert you that the last two times you went into highly 14 15 confidential the microphone apparently was still on even though the picture was still showing. 16 17 JUDGE WOODRUFF: Yes, there was a problem particularly at the beginning of your 18 19 recross. 20 MR. LOWERY: Thank you, I appreciate 21 it. JUDGE WOODRUFF: I apologize for 22 23 that. (REPORTER'S NOTE: An in-camera session was held, 24 which is contained in Volume 34, pages 2646-2655 of 25

		Page 2570
1	the transcript.)	
2	JUDGE WOODRUFF: And we're out of the	
3	In camera section and redirect is concluded so you	
4	can step down.	
5	A. Okay. Thank you very much.	
6	JUDGE WOODRUFF: And I believe we	
7	need to call Mr. Haslag next.	
8	(Whereupon, the witness was sworn)	
9	DIRECT EXAMINATION	
10	QUESTIONS BY MS. ILES:	
11	Q. Good morning. Could you state your	
12	name for the record lease?	
13	A. Joseph Haslag.	
14	Q. And it's Dr. Haslag, correct?	
15	A. Yes.	
16	Q. Dr. Haslag where are you employed?	
17	A. University of Missouri-Columbia.	
18	Q. And what is your position there?	
19	A. I'm a professor of economics.	
20	Q. Do you hold another position with the	
21	university as well as a professorship?	
22	A. I also hold the position as the	
23	director of the economic policy and analysis and	
24	research center.	
25	Q. Okay. And Dr. Haslag did you prepare	

Page 2571 direct and sure, let's see. Direct and surrebuttal 2 testimony in this case that has been pre-filed? 3 Α. Yes. Q. 4 And is that the testimony that I've 5 handed you? It. is. 6 Α. 7 And could you tell us for the record Q. 8 what the exhibit numbers for those documents are? Α. I would love to. 10 606 and 607. 11 Q. And are those documents marked 606, 606 HC and 607? 12 13 Α. Yes. 14 Q. And if I were to ask you the 15 questions that are included in that testimony here today would your answers be the same? 16 17 Α. They would. 18 Did you have any corrections to your Q. testimony? 19 20 Α. No. 21 MS. ILES: Your Honor, I'd move for the admission of the, Dr. Haslag's testimony and 22 tender the witness for cross examination. 23 JUDGE WOODRUFF: 606, HC and NP and 24 607 have been offered. Any objection to their 25

		Page 2572
1	receipt?	
2	Hearing none it will be received.	
3	JUDGE WOODRUFF: Cross examination	
4	beginning with Public Counsel.	
5	MR. ALLISON: No cross. Thank you.	
6	JUDGE WOODRUFF: MECG?	
7	MR. WOODSMALL: No questions.	
8	JUDGE WOODRUFF: Staff?	
9	MR. THOMPSON: No questions. Thank	
10	you.	
11	JUDGE WOODRUFF: Ameren?	
12	MR. MITTEN: No questions.	
13	JUDGE WOODRUFF: Move for questions	
14	from the bench then.	
15	Commissioner Kenny?	
16	CHAIRMAN KENNEY: No thank you.	
17	JUDGE WOODRUFF: Mr. Hall?	
18	COMMISSIONER HALL: No questions.	
19	JUDGE WOODRUFF: All right.	
20	There were no questions so there's no	
21	need for recross or redirect and you can step down.	
22	A. Thank you very much.	
23	MS. ILES: Judge Woodruff we have a	
24	request. Let me preface my request by explaining	
25	that I was, understood your ruling yesterday that	

Page 2573

- 1 you did not wish to hear an opening statement from
- 2 the MIEC in this matter. We do, however, have
- 3 available today to testify a representative from
- 4 the MIEC, he's the chair of the MIEC and he's from
- 5 Monsanto Corporation, his name is Steve Spinner,
- 6 he's available to provide testimony about the
- 7 stipulation which we think would be helpful to the
- 8 Commission in evaluating that stipulation.
- 9 JUDGE WOODRUFF: Are you anticipating
- 10 there will be questions from the commissioners?
- MS. ILES: We would like to ask Mr.
- 12 Spinner some questions but if the commissioners, if
- 13 you'd rather do it that way, either way.
- JUDGE WOODRUFF: Well I'll ask the
- 15 other parties.
- Do you have any objection to bringing
- 17 Mr. Spinner on?
- 18 MR. LOWERY: Yes, we do have an
- 19 objection, it's completely out of order. This
- 20 person's not on the witness list, he didn't file
- 21 any testimony and the Commission can't consider the
- 22 stipulation. The stipulation is a position of
- 23 these parties, that's all it is, they can't
- 24 consider it, they can't approve it, they have to
- 25 decide this case based on the substantial and

Page 2574

- 1 competent evidence of record and based on the
- 2 contested issues that the parties agreed upon that
- 3 are before them. It's completely improper for MIEC
- 4 to simply try to bolster the position of giving
- 5 Noranda some kind of subsidy by bringing Mr.
- 6 Spinner in at this time so absolutely we object.
- 7 JUDGE WOODRUFF: Let me ask the
- 8 commissioners.
- 9 Do you have any questions you would
- 10 like to ask Mr. Spinner for MIEC?
- 11 CHAIRMAN KENNEY: That's a loaded
- 12 question. I mean so, I guess the other question is
- do we have any questions about the nonunanimous
- 14 stipulation and agreement?
- JUDGE WOODRUFF: Right.
- 16 CHAIRMAN KENNEY: Maybe. I don't
- 17 know if I have them today, but.
- 18 MS. ILES: Mr. Spinner is available
- 19 right now, he's here today. He is not available
- 20 tomorrow, he could come back on Friday.
- 21 CHAIRMAN KENNEY: Why does it have to
- 22 be him?
- MS. ILES: He's the chairman of the
- 24 MIEC and he's just made time in his schedule to be
- 25 here Mr. Chairman. So he's here.

Page 2575 CHAIRMAN KENNEY: Let me ask a 1 2 question. MIEC is a party to the case, right? 3 MS. ILES: Yes. That's correct. CHAIRMAN KENNEY: Why wasn't he 4 5 disclosed as a witness? 6 MS. ILES: Because what he's here to 7 talk about is something that hasn't happened before 8 the hearing started. He's here to talk about the stipulation that was entered into after the hearing already started and all the testimony had been 10 filed. And that's why he didn't provide pre-filed 11 12 testimony and it's my understanding that it is not unusual, that it has happened in the past that 13 witnesses have testified about nonunanimous 15 stipulation and answered questions of the commission on this topic. 16 17 JUDGE WOODRUFF: What we've typically done is allowed extra questions at the beginning of 18 a witness's testimony who have already pre-filed 19 evidence. It would be unusual to bring in a new 20 21 witness to testify about that. I don't know that it's unprecedented, I've just never seen it done. 22 23 MR. LOWERY: May I respond to one 24 comment? It's true that this particular stipulation didn't exist until now but MIEC and 25

Page 2576

- 1 others filed a stipulation or at least supported a
- 2 stipulation back in I believe it was October that
- 3 had a price that was almost the same as the price
- 4 that is in this stipulation and many of the terms
- 5 of which are in many respects quite similar.
- 6 MIEC's had months if they wanted to put on a
- 7 witness to support rate relief for Noranda and they
- 8 chose not to do so and it's fundamentally unfair
- 9 and a violation of what the company's and any other
- 10 party's due process at this time to allow a witness
- 11 to get up without any preparation, without any
- 12 notes whatsoever and say whatever he wants to say
- in support of stipulation that doesn't even mean
- 14 anything at this point. They could have filed a
- 15 brief in the case and said we support this relief.
- 16 It makes it no more important than the stipulation,
- 17 the stipulation is nothing more than an argument at
- 18 this point.
- 19 JUDGE WOODRUFF: Mr. Hall do you want
- 20 to weigh in?
- 21 COMMISSIONER HALL: I have a
- 22 question.
- JUDGE WOODRUFF: Okay.
- 24 COMMISSIONER HALL: For Mr. Spinner.
- 25 So I would be fine with --

Page 2577

- 1 MS. ILES: I'd just like to point out
- 2 that in Ameren's opening statement they
- 3 specifically mentioned Monsanto and made the
- 4 statement that a company like Monsanto's likely to
- 5 come in. Mr. Spinner 'S from Monsanto, he can
- 6 certainly speak to that issue as well.
- 7 CHAIRMAN KENNEY: Let me ask another
- 8 question here th is for Mr. Lowery or whoever wants
- 9 to answer.
- 10 Was it contemplated that a corporate
- 11 -- I mean MIEC is an entity.
- MS. ILES: MIEC is a nonprofit
- 13 corporation and it's members are corporations.
- 14 CHAIRMAN KENNEY: Was it contemplated
- 15 that there would be some corporate representative
- 16 of MIEC to testify?
- 17 MR. LOWERY: No it was not
- 18 contemplated. MIEC is a corporation that was
- 19 formed by attorneys at Bryan Cave and all of the
- 20 officers and directors at least according to the
- 21 annual report that's filed each year are also
- 22 attorneys at Bryan Cave. MIEC has filed testimony
- 23 of numerous witnesses in this case. This is my
- 24 sixth rate case in a row and I've probably been in
- 25 20 cases with MIEC, there's never been a corporate

Page 2578

- 1 representative of MIEC appear so this would be
- 2 unprecedented at least in my 15 years of practice
- 3 here at the Commission.
- 4 CHAIRMAN KENNEY: Mr. Spinner is the
- 5 president of the organization?
- MS. ILES: He's the chair.
- 7 CHAIRMAN KENNEY: He's not listed on
- 8 any of the corporate documents?
- 9 MS. ILES: I don't think he's a
- 10 corporate officer but he's the current chair of the
- 11 organization.
- JUDGE WOODRUFF: Mr. Thompson you
- 13 want to be heard?
- 14 MR. THOMPSON: I just wanted to
- 15 remind the judge that in the past it was the
- 16 practice to allow the public to testify at rate
- 17 case hearings when they were convened here in
- 18 Jefferson City and so in the nature of a local
- 19 public hearing almost and so perhaps the Commission
- 20 could take Mr. Spinner's testimony in the same way
- 21 that the testimony of participants at local public
- 22 hearings have been taken.
- JUDGE WOODRUFF: That hasn't been the
- 24 practice in the last 15 years. At least that I've
- 25 been here.

Page 2579 1 CHAIRMAN KENNEY: Can I say I think 2 the issue is kind of disposed of, the commissioner 3 said he wants to question him, I think we're going to bring him up and swear him, I guess I'm just 4 5 trying to figure out what's fair. Do you want to take a recess after he testifies to have an 6 7 opportunity to cross examine him? JUDGE WOODRUFF: What I anticipated 8 9 doing if we do it we bring him up, ask questions 10 from the bench then we can have cross based on that and the final chance for redirect based on the 11 12 questions from the bench. 13 MS. ILES: So no direct by me? 14 JUDGE WOODRUFF: No direct by you. MS. ILES: All right. That would be 15 16 fine. 17 MR. LOWERY: And I lodge my objection and I certainly respect the right of the 18 commissioners to allow him to testify, I've lodged 19 my objection. 20 21 JUDGE WOODRUFF: Your objection is 22 noted. MR. LOWERY: There's probably nothing 23 24 more to say about it.

JUDGE WOODRUFF: Bring him forward.

Fax: 314.644.1334

25

		Page 2580
1	(Whereupon, the witness was sworn)	
2	JUDGE WOODRUFF: And for the record	
3	can you identify who you are?	
4	A. Sure. My name is Steven Spinner, I	
5	am the chair for the MIEC and I understand that	
6	just recently I was also added to the corporate	
7	documents as the vice-president of the MIEC also.	
8	That's a recent development. I am the category	
9	lead for energy procurement for Monsanto, I am	
10	responsible for energy and utility services	
11	throughout the United States for the company. In a	
12	prior position with Anheuser Busch I had the same	
13	position there and prior to that position with	
14	Anheuser Busch I was also responsible, part of a	
15	team that was responsible for buying over 1.3	
16	billion pounds of aluminum every year and so we	
17	spent a lot of time studying aluminum smelters and	
18	understanding what their cost structures were and	
19	so while my knowledge of aluminum markets is a bit	
20	dated the process and the inputs to the process I'm	
21	sure haven't changed in that approximately 10 years	
22	since I was doing that.	
23	JUDGE WOODRUFF: Okay.	
24	Mr. Chairman did you want to go	
25	first?	

		Page 2581
1	CHAIRMAN KENNEY: Yeah, actually I	
2	just have a couple questions.	
3	EXAMINATION	
4	QUESTIONS BY CHAIRMAN KENNEY:	
5	Q. Are you familiar with the document	
6	that's titled Nonunanimous Stipulation and	
7	Agreement Regarding Economic Development, Class	
8	Cost of Service, Revenue Allocation and Rate	
9	Design?	
10	A. Yes, sir.	
11	Q. What was your involvement in the	
12	preparation of the document?	
13	A. I got involved some time about 14	
14	months ago in negotiating this deal and trying to	
15	get all the consumers together in one group to sign	
16	on to the stipulation.	
17	Q. Hold on a second.	
18	A. Yes, sir.	
19	Q. I'm talking a document that was	
20	e-mailed to the parties in the case on the 9th of	
21	March, 2015.	
22	A. That's the nonunanimous stipulation.	
23	CHAIRMAN KENNEY: May I hand this to	
24	him?	
25	JUDGE WOODRUFF: Sure.	

Page 2582

- 1 A. Yes, sir.
- 2 Q. (BY CHAIRMAN KENNEY) You're familiar
- 3 with this?
- 4 A. Yes, I am.
- 5 Q. And you're saying the process of
- 6 developing this document came about 14 months ago?
- 7 A. Well, we started negotiating that
- 8 document that was filed last year asking for rate
- 9 relief which was since then denied. What we have
- 10 here is an outcropping of that, that was the basis
- 11 of it and then we built from there. But I have
- 12 been involved in negotiations for some 14 months
- 13 that finally arrived at that document.
- 14 Q. And when you say you were involved
- 15 with negotiations, with whom were you involved with
- 16 these negotiations?
- 17 A. Other consumer parties, the Office of
- 18 Public Counsel, well, most every, all of the
- 19 signators of that document listed at the bottom
- 20 were involved in the negotiations. Along with the
- 21 two that, Wal-Mart and MECG I believe is the name
- 22 of the group that are not members of that, were
- 23 also deeply involved in the negotiations of that
- 24 document.
- Q. Okay. There was a nonunanimous

Page 2583 stipulation and agreement that was filed back in 2 October of 2014. Is that the document you would 3 have been talking about? 4 A. Yes, sir. Q. That was this other one? That was. Α. 7 Right. And this was on outgrowth of Q. 8 that and some other things added to it. 9 Α. Right. 10 CHAIRMAN KENNEY: I don't have any other questions just yet. I may but I can't think 11 12 of any right now. 13 EXAMINATION 14 **OUESTIONS BY COMMISSIONER KENNEY:** 15 Q. Hello Mr. Spinner. 16 Α. Hi, how are you? 17 Q. Good. 18 Does Monsanto have any type of financial or business affiliation with Noranda? 19 20 A. No. 21 Q. Does Monsanto buy supplies from 22 Noranda? 23 Α. No. 24 Q. So why is Monsanto interested in Noranda having lower energy rates? 25

Page 2584

- 1 A. Well, it's important to us to have
- 2 Noranda on Ameren's system to help cover, their
- 3 huge amount of volume helps cover the fixed cost.
- 4 If Ameren, or I'm sorry, if Noranda were to go off
- 5 the system I would have to pick up those
- 6 additional, I, my company, the MIEC members would
- 7 have to pick up that additional fixed charge
- 8 coverage and we would see our rates estimated to go
- 9 up about 2.1 percent.
- 10 Q. So this is just the lessor of two
- 11 evils?
- 12 A. That's correct, yes.
- 13 Q. So your rate would increase by what?
- 14 1.1 --
- 15 A. Well, residentials I believe are
- 16 1.15, the industrials are about 1.5 percent, we
- 17 would be taking a bigger hit than the residentials
- 18 would be taking.
- 19 Q. That would save you six-tenths of a
- 20 percent.
- 21 A. That is correct. Additionally the
- 22 whole idea of having them there to provide the
- 23 security to the system and provide the, the system
- just works more efficiently when you have large
- 25 users on the system that you can depend to be there

Page 2585 24 hours a day seven days a week. 2 Q. Okay. Thank you. 3 JUDGE WOODRUFF: Commissioner Hall? EXAMINATION 4 5 QUESTIONS BY COMMISSIONER HALL: Good afternoon. Commissioner Kenney 6 Ο. 7 asked the majority of the questions I was going to 8 ask but I will turn to one other issue and that is the economic development rider which is Exhibit A to the nonunanimous stip. Are you familiar with 10 that? 11 12 Slightly familiar with it but I'm not a lawyer and so I haven't gone myself into looking 13 at this alternative to the stipulation. 15 So you are not involved in the Q. drafting or negotiation of this modified economic 16 17 development rider. No, sir. 18 Α. 19 Q. So you wouldn't be able to answer any 20 questions about how this could apply to any 21 particular Ameren customer. 22 No, sir. Α. 23 Q. Okay. 2.4 COMMISSIONER HALL: I have no further 25 questions.

	Page 2586
1	JUDGE WOODRUFF: Cross based on those
2	questions from the bench?
3	Ameren?
4	MR. LOWERY: I assume I can ask cross
5	about testimony he gave to a question you asked
6	initially about his position?
7	JUDGE WOODRUFF: Yes.
8	CROSS EXAMINATION
9	QUESTIONS BY MR. LOWERY:
10	Q. Is it your testimony under oath that
11	documents have been filed with the Missouri
12	Secretary of State making you an officer of MIEC?
13	A. I believe that to be correct, I was
14	e-mailed a document for my signature last week
15	which I signed and e-mailed back to Bryan Cave, I'm
16	not sure if it's been filed yet or not.
17	Q. So your testimony is you don't know
18	if it's been filed.
19	A. No, sir. I know I signed it.
20	Q. Would it surprise you that in fact it
21	has not been filed?
22	A. It would not surprise me, no. It was
23	a very short time ago.
24	Q. So in fact no change has been made
25	with the Secretary of State, isn't that true?

		Page 2587
1	A. I d	on't know that, sir.
2	MR.	LOWERY: I don't have any other
3	questions Your Ho	nor.
4	JUD	GE WOODRUFF: Any redirect based
5	on those question	s from the bench?
6	Tha	nk you, sir, you can step down.
7	MS.	ILES: Thank you Your Honor, I
8	appreciate that.	
9	JUD	GE WOODRUFF: And then I believe
10	we would be ready	for Mr. Pratt.
11	MR.	MALLIN: Yes, Your Honor.
12	(Whereupo	n, the witness was sworn)
13	JUD	GE WOODRUFF: You may inquire.
14	MR.	MALLIN: Thank you, Your Honor.
15		EXAMINATION
16	QUESTIONS BY MR.	MALLIN:
17	Q. Cou	ld you state your full name for
18	the record?	
19	A. Col	in Ronald Pratt.
20	Q. Mr.	Pratt by whom are you employed?
21	A. CRU	International.
22	Q. And	is that C-R-U, CRU?
23	A. Tha	t's correct.
24	Q. And	in what position or capacity?
25	A. Man	agement consultant and CRU

Page 2588

consultant.

Q. Did you cause to prepare and have

filed with the Public Service Commission certain

- 5 A. Yes, I did.
- 6 Q. And are those before you in Exhibits

direct testimony as well as surrebuttal testimony?

- 7 608 and 609?
- 8 A. No, they're not.
- 9 Q. Well, let me get those for you.
- 10 I'm sorry Mr. Pratt, do you now have
- 11 them before you?
- 12 A. Yes, I do.
- 13 Q. Let me ask my question again. Do you
- 14 have now before you Exhibit 608 and 609?
- 15 A. Yes, I do.
- 16 Q. And is 608 your direct testimony in
- 17 this case?
- 18 A. Yes.
- 19 Q. And is 609 your surrebuttal testimony
- 20 in this case?
- 21 A. It is.
- 22 Q. And if I were to ask you the same
- 23 questions today would you provide the same answers
- 24 that are found in both your direct as well as
- 25 surrebuttal testimony?

			Page 2589
1	Α.	Yes, I would.	
2	Q.	Is there any changes that you wish to	
3	make to any o	of that testimony?	
4	Α.	No.	
5		MR. MALLIN: Your Honor, I'd move for	
6	the admission	of Exhibits 608 and 609.	
7		JUDGE WOODRUFF: 608 and 609 are	
8	offered, any	objection to their receipt?	
9		Hearing none they will be received.	
10		MR. MALLIN: Thank you, Your Honor.	
11	I'll tender t	the witness.	
12		JUDGE WOODRUFF: For cross begin with	
13	Public Counse	el?	
14		MR. ALLISON: No questions.	
15		JUDGE WOODRUFF: MECG?	
16		MR. WOODSMALL: No questions.	
17		JUDGE WOODRUFF: United for Missouri?	
18		MR. LINTON: No questions.	
19		JUDGE WOODRUFF: Staff?	
20		MR. THOMPSON: No questions. Thank	
21	you.		
22		JUDGE WOODRUFF: Ameren?	
23		MR. NELSON: No questions.	
24		JUDGE WOODRUFF: Questions from the	
25	bench?		

		Page 2590
1	Mr. Chairman?	
2	CHAIRMAN KENNEY: No questions.	
3	Thank you Mr. Pratt.	
4	JUDGE WOODRUFF: Mr. Hall?	
5	EXAMINATION	
6	QUESTIONS BY COMMISSIONER HALL:	
7	Q. Good afternoon.	
8	A. Good afternoon.	
9	Q. You had a comment in your direct	
10	testimony that I hope you could elaborate on. You	
11	said on page 11 it is often said that an economic	
12	forecaster is driving a car with only a rear-view	
13	mirror and with a substantial blind spot. I	
14	thought it was kind of funny, but also seems	
15	abundantly accurate but I was wondering if you	
16	could just comment on that for a second.	
17	A. What it means is that when we make a	
18	full cusp we're using only information we have at	
19	present and there's a lag in the receipt of that	
20	information so that's the blind spot, so in other	
21	words what's happened in the last two or three	
22	months may not be apparent because the statistics	
23	haven't yet been published or they're going to be	
24	revised and we're driving a car with only a	
25	rear-view mirror because we know what's happened in	

Page 2591 the past but we don't know what's going to happen 2. in the future. 3 Q. Okay. COMMISSIONER HALL: I have no further 4 5 questions. 6 JUDGE WOODRUFF: Mr. Rupp? 7 Anyone wish To recross based on those 8 questions from the bench? 9 Redirect? 10 MR. MALLIN: No, Your Honor. 11 JUDGE WOODRUFF: All right. Then Mr. 12 Pratt you can step down. Α. 13 Thank you. I believe Mr. Schwartz will be next. 14 15 MR. MALLIN: Your Honor I'm told Mr. Schwartz apparently caught the flu, unbeknownst to 16 17 me. JUDGE WOODRUFF: Did anyone have any 18 cross examination for Mr. Schwartz? 19 20 MR. MALLIN: If I could have two 21 minutes to figure out where we are on that. 22 JUDGE WOODRUFF: All right. MR. MALLIN: I think we have another 23 24 witness back there we can bring out. Just give me a second if you wouldn't mind Your Honor. 25

		Page 2592
1	JUDGE WOODRUFF: Okay.	
2	(DISCUSSION HELD OFF THE RECORD)	
3	MR. MALLIN: Your Honor just to give	
4	you an update Mr. Schwartz was having GI cramps and	
5	he has gone back to the hotel, I'm hoping to hear	
6	back from him later this afternoon but we are going	
7	to bring forward Mr. Harris.	
8	JUDGE WOODRUFF: Let me ask the	
9	parties about Mr. Schwartz.	
10	Did anyone have any cross examination	
11	for him?	
12	MR. MALLIN: That's fine, Your Honor.	
13	MR. NELSON: Your Honor we would have	
14	a small amount of cross examination. Now I offer	
15	this as an alternative. My cross examination would	
16	be premised upon questions I asked him in	
17	deposition and to not further inconvenience Dr.	
18	Schwartz the court is inclined to let his direct	
19	testimony in under these circumstances. We can	
20	certainly submit our cross examination questions	
21	and answers by reference to page and line of	
22	deposition transcript as an alternative to pulling	
23	the poor man in here live.	
24	MR. MALLIN: I appreciate the offer,	
25	I may accept the offer but the reality is I really	

Page 2593 need to talk to Mr. Schwartz. As Your Honor is 2 aware I didn't ask any followup questions at his 3 deposition because there wasn't a need at the time so I think it would be prudent on my part to talk 4 5 to Mr. Schwartz when we're on our next break to see where we are and then I'll address the offer from 6 7 there. JUDGE WOODRUFF: That's fine. Got 8 plenty of other witnesses to get through today, so. 10 I expect we'll be here tomorrow as well so hopefully he can feel better tomorrow. 11 12 MR. MALLIN: He did report late 13 yesterday he wasn't feeling well. 14 JUDGE WOODRUFF: That's going around. 15 MR. MALLIN: I appreciate it Your 16 Honor, thank you. 17 JUDGE WOODRUFF: You're welcome. 18 (Whereupon, the witness was sworn) JUDGE WOODRUFF: You may inquire, 19 20 DIRECT EXAMINATION 21 QUESTIONS BY MS. ILES: 22 Q. Will you please state your full name for the record? 23 A. Thomas Harris. 24

Mr. Harris where are you employed?

Fax: 314.644.1334

Q.

25

			Page 2594
1	Α.	Silicon Valley Bank.	
2	Q.	And what is your position there?	
3	Α.	I am managing director there now. A	
4	slight change	from when I gave my testimony.	
5	Q.	Okay. That's different from what's	
6	in your testi	mony you said?	
7	Α.	Just a promotion. Same place.	
8	Q.	Congratulations.	
9	Α.	Thanks.	
10	Q.	And did you prepare pre-filed	
11	testimony in	this case which is, there are copies	
12	of it, I've h	anded to you which is marked Exhibits	
13	604 and 605?		
14	Α.	I did.	
15	Q.	And if I were to ask you the	
16	questions tha	t are included in that testimony today	
17	would your an	swers be the same?	
18	Α.	Yes.	
19		MS. ILES: Your Honor I offer	
20	Exhibits 604	and 605 and tender the witness for	
21	cross examina	tion.	
22		JUDGE WOODRUFF: 604 and 605 have	
23	been offered,	any objection to their receipt?	
24		Hearing none they will be received.	
25		And for cross examination beginning	

		Page 2595
1	with Public Counsel?	
2	MR. ALLISON: No questions. Thank	
3	you.	
4	JUDGE WOODRUFF: MECG?	
5	MR. WOODSMALL: No questions.	
6	JUDGE WOODRUFF: United for Missouri?	
7	MR. LINTON: No questions.	
8	JUDGE WOODRUFF: Staff?	
9	MR. THOMPSON: No questions.	
10	JUDGE WOODRUFF: Ameren?	
11	MR. NELSON: No questions.	
12	JUDGE WOODRUFF: All right.	
13	Questions from the bench. Mr. Chairman?	
14	CHAIRMAN KENNEY: No questions.	
15	JUDGE WOODRUFF: Mr. Kenney?	
16	COMMISSIONER KENNEY: No questions.	
17	JUDGE WOODRUFF: Mr. Hall.	
18	COMMISSIONER HALL: No questions.	
19	Thank you.	
20	JUDGE WOODRUFF: Mr. Rupp?	
21	COMMISSIONER RUPP: No questions.	
22	JUDGE WOODRUFF: There were no	
23	questions from the bench or from other parties so	
24	there's no need for recross or redirect and you can	
25	step down.	

		Page 2596
1	A. Thank you.	
2	Would Mr. Fayne be next then?	
3	MR. DOWNEY: Yes.	
4	(Whereupon, the witness was sworn)	
5	DIRECT EXAMINATION	
6	QUESTIONS BY MS. ILES:	
7	Q. Would you please state your name for	
8	the record?	
9	A. My name is Henry Fayne.	
10	Q. Mr. Fayne, where are you employed?	
11	A. I'm self employed.	
12	Q. What is the, do you have a company or	
13	a consulting business that you work with?	
14	A. I am a self employed consultant.	
15	Q. And Mr. Fayne did you prepare	
16	testimony that was pre-filed in this case, a copy	
17	of which I've handed you which has been marked as	
18	Exhibits 602 and 603?	
19	A. Yes, I did.	
20	Q. And if I were to ask you the	
21	questions that are included in that testimony here	
22	today would your answers be the same?	
23	A. Yes, they would.	
24	MS. ILES: Your Honor, I move for the	
25	admission of Exhibits 602 and 603 and tender the	

		Page 2597
1	witness for cross examination.	
2	JUDGE WOODRUFF: 602 and 603 have	
3	been offered. Any objections to their receipt?	
4	Hearing none they will be received.	
5	And cross examination beginning with	
6	Public Counsel.	
7	MR. ALLISON: No questions.	
8	JUDGE WOODRUFF: MECG?	
9	MR. WOODSMALL: Yes, Your Honor.	
10	CROSS EXAMINATION	
11	QUESTIONS BY MR. WOODSMALL:	
12	Q. Good afternoon Mr. Fayne.	
13	A. Good afternoon.	
14	Q. Just refresh my memory, you have	
15	testified on behalf of Noranda at the Missouri	
16	Public Service Commission this is your fourth time,	
17	is that correct?	
18	A. I have testified before, I'll take	
19	your word that it's the fourth time.	
20	Q. Okay. And in each of those pieces of	
21	testimony you provided a comparison of Noranda's	
22	cost of electricity to other domestic smelters, is	
23	that correct?	
24	A. That is correct.	
25	Q. And you're familiar with the smelters	

Page 2598

- 1 you have on your list?
- 2 A. With most of them, yes.
- 3 Q. Okay. And the cost of electricity
- 4 that you talk about is available at Schedule HWF-1
- 5 to your testimony, is that correct?
- A. That is correct.
- 7 Q. Okay. I'd like to ask you about a
- 8 couple of those. The first one is the word
- 9 smelter, are you familiar with that?
- 10 A. The word smelter, just generally,
- 11 yes, the outgoing smelter.
- 12 Q. Is it your understanding that the
- 13 work smelter is served electricity by a self-owned
- 14 coal burning power plant?
- 15 A. Yes, it's a fully integrated system,
- 16 coal mine plant and then the smelter.
- 17 Q. Okay. You're a former AEP executive.
- 18 Would you agree that the costs to build a coal
- 19 fired plant would be hundreds of millions if not
- 20 billions of dollars?
- 21 A. To build a new one?
- 22 **Q.** Yes.
- 23 A. Yes, that would be true.
- 24 Q. And do you know if Noranda has
- 25 explored such an option?

Page 2599

- 1 A. I would hope not.
- 2 Q. Okay. A couple of others. The
- 3 Hawesville plant, is it your understanding that
- 4 Hawesville takes service, gets electric service via
- 5 the wholesale market?
- 6 A. Yes. As of I think the beginning of
- 7 2014.
- 8 Q. Okay.
- 9 A. Or thereabouts.
- 10 Q. I'm going to ask you, let me talk
- 11 with your counsel real quick.
- 12 (DISCUSSION HELD OFF THE RECORD)
- 13 Q. (BY MR. WOODSMALL) What I'm going to
- 14 ask you to do, if you go back to your 2010
- 15 testimony, he provided the same information, a
- 16 comparison and the information there in HWF-1 that
- 17 I'll pass out was a public document. Now the same
- 18 information is highly confidential, I don't
- 19 understand the distinction for being highly
- 20 confidential here and I'm trying to avoid going In
- 21 camera for this.
- JUDGE WOODRUFF: Okay.
- MS. ILES: Your Honor, it should have
- 24 been highly confidential in the last because of the
- 25 source of the information is proprietary and that's

Page 2600 why it couldn't be disclosed. 2 MR. WOODSMALL: Well, they released 3 it 2010 and 2012 now suddenly the information is highly confidential. 4 5 MS. ILES: It's actually not Noranda's interest that we're protecting of that, 6 7 it's the source and we should have protected it in the other case. 8 JUDGE WOODRUFF: Is it the same 9 information or is it updated information? 10 MR. WOODSMALL: It's updated. 11 12 JUDGE WOODRUFF: Okay. You can 13 certainly explore that, I'm inclined to go ahead. 14 MR. WOODSMALL: Okay. We need to go 15 In camera then. 16 JUDGE WOODRUFF: Okay. 17 MR. WOODSMALL: Hold on a second, let 18 me get a foundation established and then we'll go 19 In camera. 20 JUDGE WOODRUFF: Okay. 21 MR. WOODSMALL: 979 Your Honor? 22 JUDGE WOODRUFF: Correct. 23 Q. (BY MR. WOODSMALL) Mr. Fayne, do you 24 recognize Exhibit 979? 25 Α. Yes, sir.

Page 2601 1 And would you agree that that is the Q. 2 comparison cost of electricity for the domestic 3 smelters that you filed in ER-2010 dash 0036? A. I can't recall the rate case number 4 5 but yes, it represents the 2009 data. 6 Q. Okay. MR. WOODSMALL: Now I believe we need 7 to go In camera Your Honor. 8 9 JUDGE WOODRUFF: All right. We will 10 go In camera. 11 12 (REPORTER'S NOTE: An in-camera session was held, which is contained in Volume 34, pages 2687-2688 of 13 14 the transcript.) 15 16 17 18 19 20 21 22 23 24 25

		Page 2602
1		
2	JUDGE WOODRUFF: All right. While we	
3	were in closed section Counsel offered Exhibit 979	
4	which would be, let's see, would the exhibit	
5	itself be HC?	
6	MR. WOODSMALL: No, the exhibit was	
7	never marked	
8	MS. ILES: Well, if I could just	
9	explain Your Honor. The source of the information	
10	is CRU and Noranda is able to access that	
11	information because they pay a subscription fee is	
12	my understanding and so we had asked CRU if we	
13	would be able to provide this information generally	
14	without making it confidential, I guess we must	
15	have asked after we prepared this in the last case	
16	but they did tell us no, they considered it	
17	proprietary, it's not available to the general	
18	public without a subscription and that's why we	
19	marked it HC to protect their proprietary	
20	information, it's not really a Noranda secret.	
21	JUDGE WOODRUFF: All right.	
22	Mr. Woodsmall any response?	
23	MR. WOODSMALL: Given the state	
24	policy for releasing information this has already	
25	been released, to try to unring the bell this is	

Page 2603

- 1 going back to the 2010 case, so five years ago.
- 2 The second point is the company, Noranda, has
- 3 released CRU information repeatedly as we've seen
- 4 in the various SEC filings, they include CRU
- 5 information in the decs that we've seen attached to
- 6 investor meetings they released CRU information so
- 7 the release of CRU information isn't absolute. Or
- 8 the protection of it is not absolute.
- JUDGE WOODRUFF: We'll ago ahead and
- 10 market it as HC understanding that if somebody
- 11 wants to get creative they can go back and find it
- 12 in the earlier case. But for this case we'll
- 13 market it as HC. It's 979 HC, any objections to
- 14 its receipt?
- 15 Hearing none it will be received.
- Any other cross?
- MR. WOODSMALL: No.
- JUDGE WOODRUFF: Ameren Missouri?
- MR. MITTEN: No.
- JUDGE WOODRUFF: United For Missouri?
- 21 Mr. Linton?
- 22 MR. LINTON: No questions, Your
- 23 Honor.
- JUDGE WOODRUFF: Staff?
- MR. THOMPSON: Thank you.

Page 2604 1 CROSS EXAMINATION 2 QUESTIONS BY MR. THOMPSON: 3 Q. Dr. Fayne, good afternoon. Α. I wish it was Dr. but it's not. 4 5 Mr. Fayne, excuse me. I'm glad I Q. 6 accidentally promoted you rather than accidentally 7 demoted you. 8 I understand you're an expert in the 9 power industry through years of experience, is that 10 correct? Yes, sir. 11 Α. 12 Q. And particularly they provision of 13 power to aluminum smelters, is that correct? 14 Yes, sir. Α. 15 Q. Okay. Based on your experience in the power industry would you agree with me that 16 17 there is a point on any given day at which it is more beneficial for the other ratepayers of Ameren 18 19 Missouri a point below cost at which it's better to 20 have Noranda on the system than to have them off 21 the system? 22 Α. Yes. 23 Q. Okay. And would you agree with me 24 that that point necessarily will change over time? 25 Α. Yes.

			Page 2605
1	Q.	As conditions change.	
2	Α.	Correct.	
3	Q.	Now, do you think that point could be	
4	calculated for	r a period of a week?	
5	Α.	Yes.	
6	Q.	How about a period of a month?	
7	Α.	Yes.	
8	Q.	A period of a quarter?	
9	Α.	Yes.	
10	Q.	A period of a year?	
11	Α.	Yes.	
12	Q.	A period of approximately 18 months,	
13	the average in	nterval between Ameren Missouri rate	
14	cases?		
15	Α.	Yes, I do.	
16	Q.	Thank you.	
17		MR. THOMPSON: No further questions.	
18		JUDGE WOODRUFF: For Ameren?	
19		CROSS EXAMINATION	
20 QUESTIONS BY MR. MITTEN:			
21	Q.	Continuing Mr. Thompson's line do you	
22	think that tha	at number could be calculated for five	
23	years?		
24	Α.	There could be, one could calculate a	
25	number for fiv	ve years, it would be a forecast, it	

Page 2606

- 1 would not be an absolute.
- 2 Q. How about seven years or 10 years?
- 3 A. I believe that is all doable.
- 4 Q. But it would be forecasts and not
- 5 absolute?
- 6 A. It depends on the rate making
- 7 structure quite frankly. It's been done in other
- 8 states where rates have been set or discounts have
- 9 been provided for 10 year periods where it has been
- 10 determined that other ratepayers are better off for
- 11 that whole period of time.
- 12 Q. But I'm getting to the accuracy of
- 13 the estimate as to what that point would be seven
- years or 10 years into the future.
- 15 A. That could be more difficult but I'm
- 16 not saying impossible.
- 17 Q. And would you agree that the farther
- 18 out you go the less confidence you would have in
- 19 that estimate?
- 20 A. The potential is that you might hit a
- 21 brief period where it was incorrect and the
- 22 customer might not have been better off for a
- 23 specific period but I think you could probably
- 24 determine a number where it could be concluded the
- 25 customer is better off over the entire period.

Page 2607

- 1 Q. But again how much confidence would
- you have in that number?
- 3 A. I think that could be done with great
- 4 confidence.
- 5 Q. Mr. Woodsmall noted that this is the
- 6 fourth time that you've testified on behalf of
- 7 Noranda before this Commission. Do you recall
- 8 that?
- 9 A. Yes, I do.
- 10 Q. But this, Missouri's not the only
- 11 state in which you have testified in support of a
- 12 special rate for an aluminum smelter, is that
- 13 correct?
- 14 A. That is correct.
- 15 Q. You've previously testified in
- 16 Kentucky, West Virginia and Ohio, is that correct?
- 17 A. That is correct.
- 18 Q. Now, could you please turn to page 4
- 19 of your direct testimony, and I want to focus on
- 20 the question that begins on line 19. The question
- 21 says that you conclude that the rate treatment
- 22 requested by Noranda in this proceeding is
- 23 consistent with rate treatment provided by
- 24 regulatory commissions in other states.
- 25 Did I correctly characterize the

Page 2608 1 testimony? 2 Α. That's the answer on page 5, yes. 3 Ο. And your conclusion is that it is consistent? 4 5 Α. Yes, I do believe it is. 6 In the Kentucky case that you Q. 7 testified, that was on behalf of the Hawesville 8 smelter, is that correct? Both Hawesville and Sebree smelters. 10 And in that proceeding the Kentucky Q. commission authorized the smelter to break a 11 12 contract where it was receiving service as a retail 13 customer and begin to acquire service in the 14 market, is that correct? 15 No, that's not. Their testimony with Α. the Sebree and Hawesville smelters was related to 16 17 the contract that, with Big Rivers that basically established the relationship with Big Rivers when 18 Louisville Gas and Electric transferred ownership 19 back to Big Rivers. The latest case where those 20 21 smelters each were permitted --22 Q. Mr. Fayne, I don't think you're 23 really answering my question. Could you turn to 24 page 6 of your direct testimony? 25 Α. Yes.

Page 2609

- 1 Q. And beginning on line 7 doesn't that
- 2 testimony say the Kentucky PSC approved Century
- 3 Aluminum's request to terminate the Hawesville
- 4 contract with Big Rivers before the end of the
- 5 contractual term allowing Century Aluminum to
- 6 purchase power from the market instead?
- 7 A. I understand --
- 8 Q. Isn't that what it says?
- 9 A. That's what it says but I did not
- 10 testify in that case.
- 11 Q. Thank you Mr. Fayne, that's the only
- 12 question I had for you.
- 13 And beginning at page 6 of your
- 14 direct testimony you also describe two cases in
- 15 Ohio, one in 2009 and one in 2013 that dealt with a
- special rate arrangement for the Ormet Aluminum's
- 17 Hannibal smelter. Did you testify in support of
- 18 the smelter's special rate proposal in each of
- 19 those cases?
- 20 A. Yes.
- 21 Q. The special rate arrangement for
- 22 Ormet's Hannibal smelter that the Ohio Commission
- 23 approved based rates for the smelter on the LME
- 24 price of aluminum, is that correct?
- 25 A. Yes.

Page 2610

- 1 Q. And as the LME price of aluminum
- 2 increased so did the rates the smelter paid for
- 3 electricity, is that correct?
- 4 A. Correct.
- 5 Q. The Ohio Commission also kept the
- 6 amount of rate subsidies that a smelter could
- 7 refuse in any given year, is that correct?
- 8 A. Yes.
- 9 O. And the Ohio Commission tied the rate
- 10 subsidies provided in the 2009 order to the
- 11 smelter's commitment to maintain certain minimum
- 12 levels of employment, isn't that correct?
- 13 A. Yes.
- 14 Q. And if the smelter failed to honor
- 15 that equipment and reduced employment below the
- 16 minimum level the amount of the rate subsidy
- 17 decreased, is that correct?
- 18 A. Yes.
- 19 Q. The Ohio Commission also required the
- 20 smelter to pay rates in excess of the electric
- 21 co-op's normal tariff rate if the LME price of
- 22 aluminum exceeded a certain target price, is that
- 23 correct?
- 24 A. Yes.
- 25 Q. At page 7 of your direct testimony

Page 2611

- 1 you mention a 2013 case in West Virginia that
- 2 involved a special rate arrangement for the
- 3 Ravenswood smelter. Did you testify in support of
- 4 the smelter's special rate arrangement in that
- 5 case?
- 6 A. Yes.
- 7 MR. MITTEN: Your Honor, I'd like to
- 8 have an exhibit marked.
- 9 JUDGE WOODRUFF: All right. It's
- 10 number 73.
- 11 Q. (BY MR. MITTEN) Mr. Fayne if you
- 12 could take a moment to look at Exhibit 73 and tell
- 13 me if that's a copy of the West Virginia
- 14 Commission's final order in the 2013 case involving
- 15 the Ravenswood smelter's request for special rate?
- 16 A. Does appear to be, yes, sir.
- 17 MR. MITTEN: Your Honor, I move for
- 18 the admission of Exhibit 73.
- JUDGE WOODRUFF: 73 has been offered,
- 20 any objections to its receipt?
- Hearing none it will be received.
- 22 Q. (BY MR. MITTEN) The special rate
- 23 arrangement the West Virginia Public Service
- 24 Commission approved based rates for the Ravenswood
- 25 smelter on the LME price of aluminum, is that

Page 2612 1 right? 2 Α. That's correct. 3 Q. And like the Ohio Commission decision we discussed a moment ago the West Virginia 4 5 Commission required the smelter to pay a premium above the utility's tariff rate if the LME price of 6 7 aluminum exceeded a certain level, is that correct? 8 Α. With a cap, yes. 9 Q. The West Virginia Commission required 10 the corporate parent of the Ravenswood smelter to 11 provide a written guarantee that it would pay back 12 a portion of the subsidies provided under the 13 special rate arrangement in the event the smelter 14 went out of business or was otherwise able to pay back those amounts, is that correct? 15 16 Only to the extent that the subsidies Α. 17 exceeded the base amount. 18 And the West Virginia Commission also Q. 19 required Ravenswood to make commitments to invest 20 additional capital in the smelter, is that correct? 21 Α. That is correct. 22 Q. Before we leave West Virginia the 23 special rate arrangement the West Virginia 24 Commission approved for that smelter used up to \$20 25 million in coal service tax revenues to fund the

Page 2613 rate subsidies provided to the smelter, is that 2 correct? 3 Α. That is correct. And that is an annual amount? 4 Q. 5 Α. Yes, sir. 6 And those subsidies were provided by Q. 7 legislation passed by the West Virginia 8 legislature? 9 Α. They were not specifically for the smelter but they were available to any group of 10 11 energy intensive customers. 12 Has Noranda gone to Missouri's Q. general assembly to seek any kind of public support 13 14 to help the company avoid closure of the New Madrid 15 smelter? 16 Α. I believe Mr. Smith testified that 17 they have not. Indeed Mr. Smith indicated that 18 Ο. Noranda made a conscientious decision not to seek 19 20 relief for the New Madrid smelter from Missouri's 21 general assembly because Noranda believes this 22 Commission is the appropriate place to seek that 23 relief. Do you recall that testimony? 24 Α. I do believe that was the case, yes. 25 Did Mr. Smith or anyone from Noranda Q.

Page 2614

- consult with you about that decision?
- 2 A. No, sir.
- 3 Q. So you've never had any conversation
- 4 with Mr. Smith or anyone from Noranda about its
- 5 decision not to go to the Missouri general
- 6 assembly?
- 7 A. No, sir.
- 8 Q. Do you agree with that decision?
- 9 A. I have to defer to Mr. Smith's
- 10 judgment, I am not familiar with the politics in
- 11 Missouri.
- 12 Q. At pages 5 and 6 of your direct
- 13 testimony in this case you describe a special rate
- 14 arrangement between Alcoa's Massena smelters and
- 15 the New York Power Authority sometimes referred to
- 16 as NYPA, N-Y-P-A, is that correct?
- 17 A. Yes.
- 18 Q. NYPA is not a regulatory commission
- 19 similar to the Missouri Commission but instead it's
- 20 a public power authority that sells hydroelectric
- 21 and nuclear power on a wholesale basis, is that
- 22 correct?
- 23 A. Yes, sir.
- 24 Q. Under the agreement between NYPA and
- 25 Alcoa the rate discount that was provided is tied

Page 2615

- 1 to the LME price of aluminum, is that correct?
- 2 A. It is, first of all it's not a rate
- 3 discount, it is a rate and then it is a rate that
- 4 is adjusted based on the LME.
- 5 Q. And Alcoa under that arrangement is
- 6 obligated to maintain a minimum number of jobs at
- 7 the smelter, is that correct?
- 8 A. That is correct.
- 9 Q. An Alcoa also is obligated to invest
- 10 hundreds of millions of dollars to overhaul the
- 11 Massena smelter, is that correct?
- 12 A. That was the contract, that's
- 13 correct.
- 14 Q. Now, at the time Noranda filed its
- direct testimony in this case, in December 2014,
- 16 proposing a special rate for the New Madrid smelter
- 17 both you and Noranda were aware of the conditions
- 18 imposed in Ohio, West Virginia and New York to the
- 19 special rate arrangements for aluminum smelters in
- 20 each of those states, is that right?
- 21 A. I was aware.
- 22 Q. Did you not talk to Noranda about
- 23 **that?**
- A. About what the arrangements were in
- 25 the other states? No, because we had, Noranda had

Page 2616

- 1 provided commitments in the earlier case 0224, and
- 2 the intent was to provide those same commitments
- 3 here so there was no reason to discuss it.
- 4 Q. Again my question was did you discuss
- 5 with Noranda any of the commitments or obligations
- 6 that were put on the special rate arrangements in
- Ohio, West Virginia or New York?
- 8 A. I don't recall having that
- 9 discussion.
- 10 Q. But as set out in the direct
- 11 testimony that was filed for Noranda on December
- 12 19th, 2014 Noranda's special rate proposal does not
- 13 base the price of electricity provided to the New
- 14 Madrid smelter on the LME price of alumina, is that
- 15 correct?
- 16 A. Those commitments were provided in
- 17 surrebuttal.
- 18 Q. The commitment in surrebuttal based
- 19 the price on the LME price of alumina?
- 20 A. No. I'm sorry, there was no LME
- 21 adjustment.
- 22 Q. Again Mr. Fayne my question is
- 23 limited to the testimony that was filed in December
- 24 **2014**.
- 25 A. I understand that.

Page 2617

- 1 Q. And that particular proposal does not
- 2 cap the amount of rate subsidies Noranda could
- 3 receive in any given year, does it?
- 4 A. No, it does not.
- 5 Q. And it also does not include any
- 6 commitment from Noranda to maintain any minimum
- 7 level of employment at the New Madrid smelter.
- 8 A. Explicitly in the testimony it does
- 9 not.
- 10 Q. And it would not obligate Noranda to
- 11 pay a premium above Ameren Missouri's tariff rate
- 12 if the LME price of aluminum exceeds a certain
- 13 **level**.
- 14 A. We already determined it was not
- 15 based on the LME.
- 16 Q. So the answer to my specific question
- would be no, it doesn't include that.
- 18 A. It does not include that.
- 19 Q. And it does not obligate Noranda to
- 20 make any amount of additional investment in the New
- 21 Madrid smelter, is that correct?
- 22 A. That is correct.
- 23 Q. And it doesn't obligate Noranda's
- 24 corporate parent or anyone else to pay back to
- 25 Ameren Missouri or its ratepayers any rate

Page 2618

- 1 subsidies that the New Madrid smelter receives.
- 2 A. There's no question it's for that, no
- 3 it does not.
- 4 Q. Now, as you indicated Noranda revised
- 5 its special rate proposal in surrebuttal testimony
- 6 that was filed earlier, or excuse me, in January,
- 7 by Kip Smith, Noranda's CEO, is that correct?
- 8 A. I would not use the term revised but
- 9 the commitments were explicitly identified in that
- 10 testimony.
- 11 Q. Mr. Fayne, do you know why Mr. Smith
- 12 waited until surrebuttal when no party had an
- opportunity to respond to his testimony to propose
- 14 possible employment and investment commitments?
- 15 A. As you may recall Mr. Smith was, had
- 16 had some medical issues when direct testimony was
- 17 filed and I can only assume that that was the
- 18 reason why it was not reflected initially. The
- 19 intent from the start was to show those
- 20 commitments.
- Q. Mr. Boyle is Noranda's CFO, isn't he?
- 22 A. Yes, he is.
- 23 O. Could he have included those
- 24 commitments in his testimony?
- 25 A. I have no reason why he could not

Page 2619 1 have. Q. But he didn't. 3 Α. But he did not. 4 Q. But even as revised by Mr. Smith's 5 testimony Noranda's proposal still is not tied to 6 the LME price of aluminum. 7 Α. That is correct. 8 Q. And it still doesn't include any written guarantee from Noranda that it will live up 10 to its employment or capital investment commitment. I know of no contract that would 11 Α. 12 provide for that and no it does not. 13 Q. And it doesn't propose to convert New Madrid from a retail electric customer to a 14 15 customer who procures its power in the wholesale 16 market, do you agree? 17 I can't imagine why it would but yes, I agree with you. 18 19 Q. On page 2 of your direct testimony 20 you state that generally electricity accounts for 21 approximately one-third of the production costs of an aluminum smelter. 22 23 That's correct. Α. 24 So that means that two-thirds of the Q. smelter's costs are not related to the cost of 25

Page 2620

1	eled	ctr	ic	it	y?

- 2 A. These are the costs of production and
- 3 yes, that would be correct.
- 4 Q. Would you agree that if Noranda was
- 5 able to reduce some of the two-thirds of its costs
- 6 that are not related to the price of electricity
- 7 that those reductions would have a positive effect
- 8 on Noranda's ongoing success or viability?
- 9 A. I believe they've already done that
- 10 but mechanically you are correct.
- 11 Q. Now, in its response to some data
- 12 requests that we submitted to Noranda in the 0225
- 13 complaint case Noranda identified alumina as the
- 14 second largest cost of producing aluminum at the
- 15 New Madrid smelter and during your deposition in
- 16 this case you told me you believe that's still
- 17 true, is that correct?
- 18 A. Yes.
- 19 Q. Assuming all other costs at the
- 20 smelter remain static reducing the cost of alumina
- 21 would help Noranda improve its cash position, do
- 22 you agree?
- A. Mechanically, yes.
- Q. But during your deposition you
- 25 couldn't tell me any steps Noranda has taken in the

Page 2621

- last 12 months to reduce its cost of alumina, isn't
- 2 that correct?
- 3 A. I was not privy to any of those
- 4 adjustments, that would be a question for Mr.
- 5 Boyles.
- 6 Q. And in those previous data request
- 7 responses Noranda identified labor as its third
- 8 largest cost of producing aluminum at the New
- 9 Madrid smelter and during your deposition you told
- 10 me you think that's still true, is that correct?
- 11 A. Yes.
- 12 Q. Assuming all other costs at the
- 13 smelter remain static reducing the cost of labor
- 14 would help Noranda improve its cash position, do
- 15 you agree?
- 16 A. Yes, if they were permitted to reduce
- 17 the staffing level.
- 18 Q. Well they could reduce the wages paid
- 19 to hourly employees, couldn't they?
- 20 A. I'm not sure that's even possible
- 21 given union contracts.
- 22 Q. Unions can renegotiate contracts.
- 23 A. They could and mechanically you're
- 24 absolutely correct.
- 25 Q. And they could reduce the amounts

Page 2622

- 1 that are paid to management employees who aren't
- 2 subject to collective bargaining agreements, is
- 3 that correct?
- 4 A. That is correct.
- 5 Q. And if they did all or both of those
- 6 things and all other costs at the smelter remained
- 7 static would that help improve Noranda's cash
- 8 position?
- 9 A. As a mechanic yes, as a true
- 10 viability, debatable.
- 11 Q. But during your deposition you
- 12 couldn't tell me any steps Noranda has taken in the
- 13 last 12 months to reduce its labor costs, is that
- 14 correct?
- 15 A. I do not know what they have done.
- 16 Q. I do not have any further questions.
- 17 Thank you Mr. Fayne.
- JUDGE WOODRUFF: Questions from the
- 19 bench.
- Mr. Chairman?
- 21 CHAIRMAN KENNEY: Mr. Fayne nice to
- 22 see you again.
- A. Nice to see you, sir.
- 24 CHAIRMAN KENNEY: I don't have any
- 25 questions. Thanks.

		Page 2623
1	JUDGE WOODRUFF: Mr. Kenney?	
2	COMMISSIONER KENNEY: I have no	
3	questions. Thank you.	
4	JUDGE WOODRUFF: Mr. Hall?	
5	COMMISSIONER HALL: Just a few.	
6	EXAMINATION	
7	QUESTIONS BY COMMISSIONER HALL:	
8	Q. Good afternoon Mr. Fayne.	
9	A. Good afternoon.	
10	Q. On page 4 of your surrebuttal on	
11	lines 3 and 4 taking a part of a sentence there you	
12	say that the actual performance and success of a	
13	smelter depends on the price of aluminum and it's	
14	overall cost.	
15	A. Yes, sir.	
16	Q. That's correct?	
17	A. Yes.	
18	Q. Now, you focus on the cost of	
19	electricity because that is the most significant	
20	expense that a smelter incurs.	
21	A. Partly. I focus on electricity, one,	
22	because it is the largest cost, yes, that's	
23	correct, but I also focus on electricity because	
24	that tends to be the differentiator amongst	
25	smelters.	

Page 2624

- 1 Q. Because the other costs are fairly
- 2 comparable?
- 3 A. They vary somewhat from smelter to
- 4 smelter but they don't have the same, they're not
- 5 as significant as impact on the differentiation.
- 6 Q. So they're rather constant smelter to
- 7 smelter.
- A. As a group of numbers, yes.
- 9 Q. Okay. And you don't provide any
- 10 testimony as to Noranda's overall cost of
- 11 production compared to other smelters, correct?
- 12 A. That is correct.
- 13 Q. In your direct testimony you describe
- 14 efforts by state commissions in New York, Kentucky,
- 15 Ohio and West Virginia to either approve or to set
- 16 rates designed to keep a smelter viable.
- 17 A. Yes, sir.
- 18 Q. In any of those states -- strike
- 19 **that**.
- 20 Did, are you familiar with the
- 21 statutory authority that those commissions had or
- 22 did not have to either establish or approve such
- 23 rates?
- A. In general, yes, and I can give you
- 25 description state by state if that would help.

Page 2625

- 1 Q. Well, in any of those states did the
- 2 commissions lack that authority?
- 3 A. The, clearly New York is not a
- 4 commission --
- 5 Q. Pardon me?
- 6 A. The New York, New York Power
- 7 Authority is not a commission and their, they have
- 8 the authority on their own, it is, clearly the
- 9 contract there was done in conjunction with the
- 10 governor but there was statutory authority for them
- 11 to do what they did.
- 12 **Q.** Okay.
- 13 A. In Ohio the commission believed and
- 14 it was confirmed that they had the statutory
- 15 authority to do that and they basically approved
- 16 the special contracts absent any legislation, any
- 17 legislation related.
- 18 Q. Just based upon their inherent
- 19 authority to establish just and reasonable rates?
- 20 A. Correct.
- 21 **Q.** Okay.
- 22 A. And there was, as a side bar there
- 23 were some legislative review in Ohio about whether
- 24 the commission could approve special contracts and
- 25 the thrust of that review was really around the

Page 2626

- 1 fact that many of the special contracts that were
- 2 in place were never made public so that that
- 3 legislative review really confirmed that the
- 4 commission had the authority to do it but insisted
- 5 that it all be in the public domain. In West
- 6 Virginia it was a little less clear. The
- 7 commission approved the original contract for the
- 8 Ravenswood smelter on its own authority. The staff
- 9 of the commission was the only one who objected
- 10 claiming that the commission did not have the
- 11 statutory authority so that when the Ravenswood
- 12 smelter went back for this latest order, latest
- 13 review, as a, in order to ensure that there was no
- 14 court appeal, a renewed contract, there was a
- 15 movement to get the legislature to pass legislation
- 16 at that point in time which did confirm that the
- 17 commission had the authority and established some
- 18 parameters. But the initial efforts in both West
- 19 Virginia and Ohio, well, the only effort in Ohio
- 20 basically was done at the regulatory commission
- 21 without any additional authority.
- 22 O. So those are the four states with
- 23 which you are familiar?
- 24 A. Kentucky, the Kentucky issue was not
- 25 really a special rate, it was approving a contract

Page 2627

- 1 with a utility. I'm not sure if falls quite in the
- 2 same category. The authority for that commission
- 3 which is an interesting outcome, there is no
- 4 customer choice in Kentucky yet the commission
- 5 authorized the two smelters to go out, that there
- 6 is a work around because they technically still buy
- 7 their power through a distribution co-op so that
- 8 all that the commission did in that case was to
- 9 allow them to break the contract.
- 10 Q. So looking at Exhibit 1 for your
- 11 direct testimony, and I'm not going to reference
- 12 specific numbers so we can stay in open session,
- 13 you mention four of the states. What about the
- 14 others?
- 15 A. Well, Warwick as we discussed earlier
- 16 is self generation so there is no regulatory
- 17 authority over the price that they pay, they just
- 18 help generate. If we look at, let's see, Mt. Holly
- 19 is served by Sante Cooper which is an electric
- 20 cooperative which is self-governing, there is no
- 21 regulatory oversight over Sante Cooper, they are
- 22 certainly composed of a board of their members and
- 23 that they determine the rate that they will charge
- 24 the smelter. They do, they are giving the smelter
- 25 special rates compared to a full tariff, obviously

Page 2628

- 1 it's not a very great rate but it is a discount
- 2 from what their full rate would be.
- 3 Q. And what is the financial status of
- 4 Mt. Holy?
- 5 A. Mt. Holly is probably precarious. I
- 6 think it's important to understand that the
- 7 difference among smelters is not only their cost of
- 8 production and whether they can generate cash from
- 9 operations it's a question of their basic liquidity
- 10 position too and how much they can sustain the Mt.
- 11 Holly smelter is probably not performing any better
- 12 than the New Madrid smelter but they are owned by
- 13 Alcoa and Century both of which have multiple
- 14 smelters so they are much larger organizations and
- 15 therefore have some more financial capability to
- 16 basically withstand those temporary downturns.
- 17 O. So if Noranda had 2 or \$300 million
- 18 more in the bank we might not be here today?
- 19 A. Or if Noranda was a multi smelter,
- 20 multi, you know, global owner of smelters they
- 21 would have some diversity which might help them in
- 22 that regard.
- Q. Thank you.
- 24
  I think you were going down the list.
- 25 A. I'm sorry. I think the only one I

Page 2629

- 1 left out, well we have Ferndale and Wanachi who are
- 2 both served by hydro facilities out west and they
- 3 are served at, I don't know how to describe them,
- 4 they're served at tariff rates essentially or full
- 5 cost of service but they're all hydro based which
- 6 makes the costs lower.
- 7 Q. Through a comment in your testimony,
- 8 I'm not finding it right now -- oh, here. So page
- 9 3 of your direct where you say that on line 2 in
- 10 the U.S in 1980 there were 32 smelters, today there
- 11 are only eight and then in every instance the
- smelter shut down because of high power costs.
- 13 I want to give you a chance to
- qualify that or that's 100 percent the reason why
- 15 every single, those 24 smelters shut down? That
- seems like a pretty strong statement.
- 17 A. Well, it's a strong statement and one
- 18 could argue it's somewhat exaggerated but basically
- 19 in all of those cases the press reports indicated
- 20 that they were shutting down because the cost of
- 21 electricity relative to the global cost of
- 22 electricity was too high and therefore the smelter
- 23 was not profitable over the long term.
- Q. So you base that assertion on press
- accounts.

Page 2630

- 1 A. In most of those cases. I think in
- 2 terms of more recent ones, for example the Ormet
- 3 smelter I can tell that you is true firsthand and
- 4 in terms of the Ravenswood one I can tell you that
- 5 is true firsthand.
- 6 O. Which one is the Ohio?
- 7 A. Hannibal. It's Ormet Aluminum
- 8 Hannibal smelter.
- 9 O. And that's the one that shut down?
- 10 A. That shut down just in the last year.
- 11 Q. And is it, if you know, is the plant
- 12 currently mothballed?
- 13 A. The plant has been scrapped, sold for
- 14 scrap.
- 15 Q. What did they get for it?
- 16 A. I have no idea but it's purely scrap
- 17 metal. They did put it up for sale prior to
- 18 shutting it down, because of the power rate that
- 19 was available there were no buyers, they put, the
- 20 only one that bid on it was the scrap metal buyer
- 21 and it was sold and it is, I think it has been
- 22 dismantled.
- Q. Thanks.
- 24 COMMISSIONER HALL: No further
- 25 questions.

			Page 2631	
1		JUDGE WOODRUFF: Mr. Rupp.		
2		EXAMINATION		
3	QUESTIONS BY C	COMMISSIONER RUPP:		
4	Q.	I just have a generic question, it's		
5	about your HC	direct exhibit that you had filed on		
6	your direct te	stimony but I'm not going to ask you		
7	any questions	about numbers. But are you familiar		
8	with the table	that I'm referring to?		
9	Α.	Page F-1?		
10	Q.	Yes, the aluminum smelter. In the		
11	far column the cost of electricity.			
12	Α.	Yes.		
13	Q.	Is that factoring in all costs to the		
14	smelter?			
15	Α.	It is the cost of electricity		
16	delivered to t	he smelter.		
17	Q.	Delivered. So all costs are factored		
18	in, all charges and everything.			
19	Α.	Yes.		
20	Q.	Thank you.		
21		JUDGE WOODRUFF: Any redirect based		
22	on questions f	from the bench?		
23		We'll go back to MECG first.		
24		MR. WOODSMALL: Just a couple		
25	questions but	I think we need to go In camera.		

		Page 2632
1	JUDGE WOODRUFF: Okay. All right.	
2		
3	(REPORTER'S NOTE: An in-camera session was held,	
4	which is contained in Volume 34, pages 2719-2721 of	
5	the transcript.)	
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

	Page 2633
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

Page 2634

1

- 2 Q. (BY MR. THOMPSON) I want to inquire
- 3 further about the arrangement paid by the New York
- 4 Power Authority.
- 5 A. Yes, sir.
- 6 Q. Now when Mr. Mitten was inquiring he
- 7 characterized that as a wholesale supplier of power
- 8 and you agreed with him. Is it in fact true that
- 9 the New York Power Authority only sells power at
- 10 wholesale?
- 11 A. No, I think I missed that wholesale
- 12 number, they do provide power directly to the
- 13 smelters.
- 14 Q. So are those sales to the smelters,
- 15 are those on retail tariffs?
- 16 A. I'm not sure what the precise
- 17 structure is of the New York Power Authority
- 18 tariffs.
- 19 **Q.** Okay.
- 20 A. So I can't answer the question.
- 21 Q. Are you aware that there's a statute
- 22 in Missouri that might allow Noranda to take power
- 23 on a wholesale basis?
- 24 A. I understand that, with the caveat
- 25 that they have a contract with Ameren, yes, I am

Page 2635

- 1 aware of that.
- Q. Okay. Well let's just set that
- 3 contract aside for the moment with respect to these
- 4 questions. Is it your opinion if it exercised that
- 5 option, is it your opinion that it would have to
- 6 take power subject to FERC rates?
- 7 A. That I believe would be the case but
- 8 I am not an attorney so I certainly won't opine on
- 9 that.
- 10 Q. Okay. Thank you very much,
- 11 MR. THOMPSON: No further questions.
- JUDGE WOODRUFF: For Ameren?
- 13 EXAMINATION
- 14 OUESTIONS BY MR. MITTEN:
- 15 Q. Mr. Fayne I'd like to follow up on
- some questions from Commissioner Hall regarding
- 17 statutory schemes in other states. specifically
- 18 West Virginia. You still have a copy of Exhibit 73
- in front of you?
- 20 A. Yes.
- Q. Could you please turn to page 16?
- 22 A. Yes, sir.
- 23 Q. The second full paragraph from the
- 24 bottom of that page states in the statute relating
- 25 to the determination of a special rate for energy

Page 2636

- 1 intensive industrial consumers the legislature
- 2 specifically approved the concept of a level and
- 3 structure of rates based not solely on cost and not
- 4 absolutely without some level of differentiation
- 5 from traditionally set rates.
- 6 Did I read that correctly?
- 7 A. You did.
- 8 Q. Do you know if the Missouri general
- 9 assembly has approached the concept that is
- 10 described in the paragraph I just read?
- 11 A. I do not know.
- 12 Q. Let's move down to the next paragraph
- 13 that describes West Virginia code section 24 dash 2
- 14 dash 1J paren lower case a, close paren, paren 6,
- 15 close paren which says permits the imposition of a
- special rate that in the judgment of the commission
- is required for continued new or expanded operation
- 18 of energy intensive industrial consumers and can
- 19 reasonably expected to support the long term
- operation of energy intensive industrial customers.
- 21 Do you see that?
- 22 A. I do.
- Q. Do you know if Missouri has a statute
- 24 like that?
- 25 A. I do not.

Page 2637

Fax: 314.644.1334

1 Q. Let's move to the next paragraph 2 which describes West Virginia, code section 24 dash 3 2 dash 1J paren lower case C, close paren, which according to the order authorizes the commission to 4 5 consider in addition to all factors which the commission may consider in setting rates for 6 7 consumers of electric power a rate that may take 8 into consideration fluctuations in the market prices for goods and products produced or other variables or factors which may be relevant to or 10 11 affect the continuing vitality of the energy 12 intensive industrial customers. 13 Do you see that? 14 I do. Α. 15 Q. Do you know if Missouri has a statute that's similar to that? 16 17 Α. I do not. And let's go down to the next 18 Q. 19 paragraph which describes West Virginia code 20 section 24 dash 2 dash 1 J paren lower case E, 21 close paren, and according to the order that price 22 that in order to qualify for the special rate the 23 energy intensive industrial customer must provide 24 information and data demonstrating how the special 25 rate advances the legislative policy goals and

Page 2638

- 1 findings set forth in the legislation.
- Do you know if Missouri has a statute
- 3 similar to that?
- 4 A. I do not.
- 5 Q. And finally we'll go down to the next
- 6 paragraph which describes West Virginia code
- 7 section 24 dash 2 dash 1J paren lower case F, close
- 8 paren which according to the order authorizes the
- 9 commission to determine whether any excess revenue
- 10 or revenues shortfall created by a special rate
- 11 should be allocated among any other customers of
- 12 the utility and whether the determination of how
- 13 that revenue shortfall or excess revenue should be
- 14 allocated is just, reasonable and fairly balances
- 15 the interests of other consumers, the utility and
- 16 the customers receiving the special rate.
- Do you see that?
- 18 A. I do.
- 19 Q. Do you know if Missouri has a statute
- 20 similar to that?
- 21 A. I do not know.
- 22 Q. No further questions, thank you.
- JUDGE WOODRUFF: All right. Then
- 24 redirect.

25

		Page 2639
1		
2	REDIRECT EXAMINATION	
3	QUESTIONS BY MS. ILES:	
4	Q. Mr. Fayne counsel for Ameren asked	
5	you some questions about special rate relief that	
6	was offered to various other smelters around the	
7	country and I wanted to follow up on some of those	
8	questions.	
9	First he asked you about the Kentucky	
10	case that involves Sebree in Hawesville that	
11	involved the, a contract that the smelters were	
12	authorized to break, do you remember those	
13	questions?	
14	A. I do.	
15	Q. And I think you started to tell us	
16	something about your testimony in that case and he	
17	cut you off. I just want to give you the	
18	opportunity to explain what your role in that case	
19	was.	
20	A. I had no role in the case that	
21	allowed the smelters to break the contract, I was	
22	not involved at all. I was involved several years	
23	prior in the case that established the contract to	
24	begin with.	
25	Q. Okay. And does that have any	

Page 2640

- 1 relevance to the situation with Noranda in this
- 2 case?
- 3 A. I'm not sure what many of these, what
- 4 relevance they have.
- 5 Q. All right. Then you, he asked about
- 6 a special rate that was set for Ormet?
- 7 A. Yes.
- 8 Q. And this is the smelter that
- 9 Commissioner Hall asked you some questions you
- 10 explained has been sold for scrap.
- 11 A. That's right.
- 12 Q. So what happened? They got a special
- 13 rate and Mr. Mitten went through the conditions on
- 14 that special rate but apparently that did not
- 15 provide sufficient relief to keep the smelter in
- 16 business?
- 17 A. They had a special rate, they had
- 18 some equity support, the special rate had a
- 19 declining discount over time. As it approached
- 20 toward the end of the contract it was an
- 21 insufficient discount, the company asked for an
- 22 acceleration of the remainder of the discount as
- 23 well as for an incremental discount for one year at
- 24 which time they had intended to self generate the
- 25 commission concluded that they did not want to give

Page 2641

- 1 the additional amount. The one potential buyer of
- 2 the plant, of the smelter basically determined that
- 3 with that power rate there was no way to keep it
- 4 viable more than 12 months and therefore chose not
- 5 to exercise its option.
- 6 O. Did the conditions that Mr. Mitten
- 7 went through that were placed on their special
- 8 rate, did they come into play at all?
- 9 A. Never.
- 10 Q. Okay. And then you also mentioned
- 11 Ravenswood which received a special rate and also
- 12 went out of business.
- 13 A. Ravenswood had a special rate back in
- 14 2006 and this was prior to any legislation in West
- 15 Virginia, it lasted for about four years and it was
- 16 based on an LME index. The design was such that it
- 17 didn't provide sufficient flexibility to get
- 18 through the peaks and troughs of the LME cycle and
- 19 as a result when the LME fell dramatically the
- 20 company became cash poor, it's liquidity went down
- 21 to zero and it was forced to shut down. It has
- 22 been shut down since 2009, the special rate that we
- 23 were talking about in 2013 was their request for a
- 24 special rate intended to restart the smelter, the
- 25 company concluded that the rate relief provided in

Page 2642

- 1 that case was insufficient to support a restart.
- 2 Q. Okay. Mr. Mitten and Mr. Thompson
- 3 both asked you about a wholesale contract for
- 4 Noranda, do you remember those questions?
- 5 A. I do.
- 6 Q. Do you know whether Noranda has
- 7 considered a possible wholesale contract with
- 8 Ameren?
- 9 A. My understanding is there were
- 10 discussions regarding a potential for transforming
- 11 the current relationship to a wholesale one versus
- 12 a retail one.
- 13 Q. Do you know why Noranda has not
- 14 agreed to this wholesale option?
- 15 A. I was not directly involved in the
- 16 latter part of those negotiations but I understand
- 17 that the, it was unclear who would bear the risk if
- 18 the rate was not supported.
- 19 Q. It was unclear who would bear the
- 20 risk?
- 21 A. My understanding is that it was a
- 22 risk that was intended to be imposed on Noranda but
- 23 it was never settled where that risk would reside.
- Q. Okay. Do you know whether or not
- 25 part of the risk had to do with whether or not the

Page 2643

- contract would be upheld as legal?
- 2 A. I'm not sure whether that was an
- 3 issue or not.
- 4 MS. ILES: No further questions.
- 5 JUDGE WOODRUFF: Okay. Then you can
- 6 step down. Thank you, sir.
- 7 And we'll take a break before the
- 8 next witness which I believe will be Mr. Brubaker.
- 9 (RECESS TAKEN BY PARTIES)
- JUDGE WOODRUFF: All right, let's go
- 11 back on the record. We're back from our break and
- 12 Mr. Brubaker has taken the stand.
- 13 Did you testify earlier?
- 14 A. I did, yes, sir.
- 15 JUDGE WOODRUFF: You are still under
- 16 oath then.
- 17 A. I am.
- 18 MR. DOWNEY: Judge, did I not get a
- 19 ruling yet on introducing Exhibits 503, 504 or 505,
- 20 Mr. Brubaker's direct, rebuttal and surrebuttal but
- 21 he has a modification to one of the schedules in
- 22 his testimony based on the stipulation that the
- 23 nonunanimous stipulation that was filed and what I
- 24 did was I provided that schedule to all counsel and
- 25 to the commissioners and I had it marked as Exhibit

Page 2644

- 1 534 in anticipation that there would be questions
- 2 about how a \$34 rate would impact other classes.
- 3 So I thought I'd bring that to your attention now.
- 4 JUDGE WOODRUFF: Okay. What you gave
- 5 me is 534 has multiple pages with Schedules 6, 7, 8
- 6 and 9, is that correct?
- 7 MR. DOWNEY: I believe that is
- 8 correct.
- 9 JUDGE WOODRUFF: Okay. Are you going
- 10 to just go ahead and offer this?
- MR. DOWNEY: I'll offer them all now,
- 12 I know there'll be an objection to Exhibit 534.
- JUDGE WOODRUFF: All right.
- 14 All right. Brubaker's direct 503,
- 15 rebuttal 504 and 505 have been offered, any
- 16 objections to those documents? I'll deal with the
- 17 other one later.
- 18 Okay, 503, 504 and 505 are admitted,
- 19 534 also has been offered, any objection to its
- 20 receipt?
- 21 MR. LOWERY: Your Honor I do object.
- 22 As I understand it this is a recalculation of an
- 23 exhibit to one of Mr. Brubaker's testimonies,
- 24 represented to be based upon the rate reflected in
- 25 the nonunanimous stipulation, again that

Page 2645 nonunanimous stipulation is nothing really more 2 than a brief at this point and I don't think that 3 it's appropriate that witnesses can take the witness stand, put a bunch of new numbers in the 5 record just because they are advocating a different 6 result. 7 JUDGE WOODRUFF: Anyone else wish to 8 respond? 9 MR. DOWNEY: I can respond to the objection. 10 11 JUDGE WOODRUFF: Go ahead Mr. Downey. 12 MR. DOWNEY: I can withhold offering 13 that until I see if there are any questions about the \$34 rate and if there are then I can introduce 14 it at that time. 15 16 JUDGE WOODRUFF: All right. We'll 17 defer ruling on that until we go through the cross examination questions and questions from the bench. 18 19 Okay. 20 So are you offering for cross at this 21 point? 22 MR. DOWNEY: I am. 23 JUDGE WOODRUFF: All right. Public 24 Counsel?

MR. ALLISON: No cross, thank you.

Fax: 314.644.1334

25

	Page 2646
1	JUDGE WOODRUFF: MECG?
2	MR. WOODSMALL: Thank you, Your
3	Honor.
4	CROSS EXAMINATION
5	QUESTIONS BY MR. WOODSMALL:
6	Q. Yes, a couple questions.
7	Were you involved in Ameren's last
8	case, case number ER-2012-0166?
9	A. Yes.
10	Q. And do you recall in the context of
11	that case the parties signed and filed a
12	stipulation regarding how to handle revenue
13	allocation?
14	A. I believe that's correct. I don't
15	know if it was unanimous or not but something was
16	filed.
17	Q. Okay. Do you recall under that
18	and do you know under that stipulation did MIEC and
19	Noranda sign that stipulation?
20	A. Yes. They did.
21	Q. Do you recall under that stipulation
22	whether MIEC and Noranda agreed to an equal percent
23	across the board of the rate increase?
24	A. That's my recollection.
25	Q. Okay.

Page 2647 Α. For that part of the rate increase 1 2 other than what was dealing with the MEEIA charges 3 which were handled separately. Okay. And do you recall in the last 4 Q. 5 case that Noranda, or Ameren received a 10.1 percent rate increase? 6 7 I don't recall the total number, it 8 sounds about right. 9 Q. And if you need to see the report and 10 order I can provide it to you. 11 Would you accept that the report and 12 order in that case was issued on December 12th, 13 2012? 14 Α. Yes. 15 Turning to your direct testimony, your schedules MEB-COS 6 through 9. 16 17 Α. Okay. 18 First off would you agree that these Q. 19 numbers that you calculated were based upon revenue 20 neutral, they're based upon current rates, is that 21 correct? 22 Α. Yes. 23 Okay. And you do not consider the Q. 24 impact of any revenue requirement increase 25 authorized by this Commission in this case, is that

Page 2648 1 correct? 2 Α. These schedules do not. 3 Q. Okay. Turn to MEB-COS dash 9. Let me know when you're there. 4 5 Α. Okay. 6 As I read this the impact of Q. 7 Noranda's rate proposal, and that's the 32.50 rate 8 and elimination of the FAC would be an impact on my clients, the large primary service, of 1.81 percent, is that correct? 10 Based on a \$23.50 rate and for those 11 12 of your clients here in the LPS class the average would be 1.81 percent. 13 14 Q. Okay. And turning to the schedule 15 before that, MEB-COS dash 8. Let me know when 16 you're there. 17 Α. I'm there. 18 This is the calculation of the impact Q. if the smelter shut down, is that correct? 19 20 Α. Correct. 21 And under this calculation the 48 22 month average the impact to all customers would be 23 1.64 percent, is that correct? Yes. It is. 24 Α. 25 Okay. So at least under your Q.

Page 2649

- 1 proposal for the large primary service customers
- 2 they would be better off with Noranda closing down
- 3 by point 17 percent, is that correct?
- 4 A. If you believe the 48 month average
- 5 which we do not and which Mr. Dauphinais can
- 6 address. We believe the relevant calculations are
- 7 the first two columns, the 36 month average
- 8 consistent with how the, everybody in the case that
- 9 did fuel runs had looked at the fuel issue so it
- 10 was 2.01 to 2.22 percent.
- 11 Q. But if the Commission accepts I
- 12 believe it's Staff's methodology, the 48 month
- 13 average, the large primary customers would be
- 14 better off with Noranda shutting down than
- 15 accepting Noranda's proposal in this case, is that
- 16 correct?
- 17 A. It would be on the edge.
- 18 Q. It's a yes or no question. They
- 19 would be point 17 percent better off with Noranda
- 20 shutting down?
- 21 A. Yeah, if you look at the absolute
- 22 value of the numbers and don't consider the
- 23 competency or the relevance of the underlying
- 24 number in that file.
- 25 Q. I may have to get you a heavier coat.

Page 2650

- 1 A. That's okay, I'm doing all right.
- 2 Q. The customers, the large primary
- 3 customers would be point 17 percent better off with
- 4 Noranda shutting down than the Noranda proposal in
- 5 this case, is that correct, yes or no?
- 6 MR. ALLISON: Can I just lodge a
- 7 clarifying objection.
- 8 This was the proposal that was
- 9 originally filed as opposed to the stipulated
- 10 proposal, is it not? What are we talking when
- we're talking about proposal, I'm sorry?
- 12 MR. WOODSMALL: The Noranda proposal
- 13 in this case.
- MR. ALLISON: So the 32.50 rate which
- 15 is not their position now.
- 16 MR. WOODSMALL: The 32.50 is all that
- 17 is in evidence now, correct.
- 18 MR. ALLISON: Okay. I just want to
- 19 make clear what position Noranda has taken and
- when.
- Q. (BY MR. WOODSMALL) So under the
- 22 32.50 proposal large primary customers would be
- 23 better off with Noranda shutting down, yes or no?
- 24 A. Only under one of the three
- 25 calculations presented.

Page 2651 1 Q. Yes or no, under the 48 month 2 average. 3 Under the 48 month average which is one of the three the answer is yes. 4 5 Q. Okay. And would you agree that under the Noranda proposal as presented in your direct 6 7 testimony this would exclude any FAC, foot FAC 8 adjustments, is that correct? When you say this what do you mean? 10 The Noranda proposal is to exclude Q. future FAC adjustments, is that correct? 11 12 Future adjustments, yes. The impact of the current FAC is reflected in MEB-COS 9 at its 13 14 current level of \$4.40 for megawatt hours. 15 The Noranda proposal is to exempt Q. themselves from the application of the FSC, is that 16 17 correct? 18 Α. Yes. For the future. 19 And so the differential of point 1, Q. 20 if the FAC has a positive adjustment the 21 differential would be greater than point 17, is that correct? 22 23 Already that would not be true 24 because the fuel adjustment has already decreased from 4.4 roughly to 3.96 so that already would not 25

Page 2652

- 1 be true.
- Q. Okay. The Noranda proposal in this
- 3 case is to have a limited future escalator, is that
- 4 correct?
- 5 A. The file proposal in my testimony,
- 6 yes.
- 7 Q. And can you tell me what that is,
- 8 what that escalator is?
- 9 A. Sure. One percent annually on the
- 10 dollar, on the 12 month anniversary of the
- 11 effective date of the rates from this case.
- 12 Q. So the differential between large
- 13 primary customers, the impact to large primary
- 14 customers associated with the Noranda proposal and
- 15 then shutting down will grow as a result of that
- 16 limited escalator, is that correct?
- 17 A. I need to hear that again. Not sure
- 18 I understand what the premise is.
- 19 Q. The current differential as we
- 20 discussed using the 48 month average, and all my
- 21 questions are about the 48 month average, the
- 22 current differential is point 17 percent, is that
- 23 correct?
- 24 A. Under those assumptions, yes.
- Q. Okay. And will that differential

Page 2653 grow because of the limited escalator that you have 2 proposed in your testimony? 3 It will depend on what happens with the net actual voided energy costs but likely it 4 5 will. 6 Q. Okay. 7 MR. WOODSMALL: I have no further 8 questions. Thank you. 9 JUDGE WOODRUFF: Staff? 10 MR. THOMPSON: Thank you, Judge. 11 CROSS EXAMINATION 12 QUESTIONS BY MR. THOMPSON: 13 Q. Do you have Exhibit 534 in front of 14 you? 15 Α. Yes, sir, I do. 16 Can you tell me what that is? Q. 17 Α. I can. This is, I would call it 18 supplemental information based on the \$34 rate 19 contained in the nonunanimous stipulation and agreement. 20 21 Q. Did you calculate this? 22 A. I did. 23 Q. And you prepared this document? 2.4 I did. Α. 25 Q. Now, I think you said in your answer

Page 2654 that there was a \$34 rate that had been proposed? 2 Α. That's correct. 3 Q. And how was that proposed? Α. In the nonunanimous stipulation and 4 5 agreement. 6 Now you understand there's been an Q. 7 objection to that. I do. 8 Α. 9 Q. Okay. 10 Mr. Brubaker, were you in the room when I was inquiring of Mr. Fayne? 11 12 Α. I was. 13 Q. So would you agree that there is a 14 point that you could calculate today, there is a 15 rate at which Noranda's ratepayers, or excuse me, Ameren Missouri's ratepayers other than Noranda 16 would be better off with Noranda on the system than 18 off the system? A. I would. 19 20 Q. A rate below cost. 21 Α. A rate below any embedded allocated 22 cost. 23 Costs of service. Q. 24 Any allocated embedded costs. Α. 25 Q. Correct. And do you have an opinion

Page 2655 as to what that number is for today? Α. I haven't looked for what it is 3 today. 4 Q. Okay. Do you have an opinion as to 5 what that number would be for any particular day? I haven't looked. Α. 7 Q. Okay. I do not. 8 Α. Q. But you are confident you could 10 calculate it? One could make a determination based 11 Α. on available market data. 12 13 Q. And how much confidence would you have in that calculation? 14 15 Not as much as knowing what it was Α. last week or the week before. 16 17 Q. Okay. Now I'm just talking a particular day. 18 19 Now, if you calculated that rate for 20 today could you calculate it for a week? 21 A. I believe the market information is 22 available to do so. 23 O. How about a month? 24 Α. I think so, yes. 25 Q. A quarter?

		Page 2656
1	A. Yes.	
2	Q. A year?	
3	A. Yes.	
4	Q. How about an 18 month period such as	
5	the average interval between Ameren Missouri rate	
6	cases?	
7	A. I think a determination, a reasonable	
8	estimate could be made based upon current	
9	information.	
10	Q. Thank you.	
11	I have no further questions.	
12	JUDGE WOODRUFF: All right. For	
13	Ameren.	
14	CROSS EXAMINATION	
15	QUESTIONS BY MR. LOWERY:	
16	Q. Following up on Mr. Thompson's	
17	questions. You calculated for example a forecast	
18	of what the voided cost would be with Noranda on	
19	the system versus off the system on an 18 month	
20	basis that would be a forecast, right?	
21	A. It would be, it could either be a	
22	fundamental forecast or it could be based on market	
23	indexes.	
24	Q. But in any event it's a prediction of	
25	the future.	

Page 2657

- 1 A. It's looking forward, you could lock
- 2 in a price, that's my point.
- 3 Q. I didn't ask whether you could
- 4 contract and lock in a price. Let's imagine we're
- 5 not contracting, we're not locking in a price,
- 6 we're not hedging anything, okay?
- 7 A. Okay.
- 8 Q. All we're doing is we're trying to
- 9 say I'm trying to predict over the next 18 months
- 10 whether or not Ameren Missouri's customers will be
- 11 better off with Noranda on the system or off the
- 12 system. Do you understand that assumption?
- 13 A. I do.
- 14 Q. And if you were doing that you would
- 15 be making an estimate or a forecast of whether or
- 16 not that would be true because you wouldn't know
- whether it will be true or not, would you?
- 18 A. Right. We don't know for sure about
- 19 the future.
- 20 Q. It's a lot like what Mr. Pratt said
- 21 when he said driving with a blind spot and only
- 22 with a rear-view mirror, right, you cannot see
- 23 forward, can you?
- 24 A. Can not be absolutely certain.
- 25 Q. And if you prepared such a forecast

Page 2658

- and you were to say, let's imagine the number was
- 2 35 and Noranda would be contributing \$40 if they
- 3 were paying retail rates on the system, just as a
- 4 hypothetical, okay, you understand that? You
- 5 understand those assumptions?
- 6 A. I think so, yes.
- 7 Q. And so your forecast was going to be
- 8 35 but if it turned out that the actual turned out
- 9 to be 41 or 42 then the forecast that said the
- 10 customer would be better off with Noranda on the
- 11 system actually would turn out to be incorrect,
- 12 isn't that right?
- 13 A. For that period of time, yes.
- 14 Q. And isn't it true the farther out you
- go the less reliable such a forecast would become,
- 16 isn't that true?
- 17 A. That is correct.
- 18 Q. There isn't really a whole lot of
- 19 viability in the markets beyond what, two years,
- 20 three years at best?
- 21 A. Two or three years, yes.
- 22 O. The calculations that are reflected
- 23 in Exhibit 534, and I'm not asking you to identify
- 24 them, but I'm asking you simply when did you
- 25 perform these calculations?

		Page 2659
1	A. I prepared these at the request of	
2	counsel last week.	
3	Q. Last week. So you've had these	
4	figures for a week or more, is that right?	
5	A. I had them, there was no stipulation	
6	until a couple days ago but I had them last week.	
7	Q. Okay.	
8	MR. LOWERY: I don't have any further	
9	questions.	
10	JUDGE WOODRUFF: Come up for	
11	questions from the bench.	
12	Mr. Chairman?	
13	EXAMINATION	
14	QUESTIONS BY CHAIRMAN KENNEY:	
15	Q. Mr. Brubaker, good afternoon.	
16	A. Good afternoon.	
17	Q. Have you offered an opinion on the	
18	Ameren proposal to move Noranda to a wholesale	
19	rate?	
20	A. I have not presented any testimony on	
21	that question.	
22	Q. Do you have an opinion?	
23	A. I had conversations with Noranda as	
24	they were having the negotiations with Ameren, I	
25	have to be very careful, it's all under	

Page 2660

- 1 confidentiality agreements. I think I can say it
- 2 was my view that there were substantial potential
- 3 risks of going to that kind of a structure.
- 4 Q. And what was the risk?
- 5 A. The risk that I saw, the main risk
- 6 was in the first place being able to get that
- 7 structure approved. That was a risk. Were it to
- 8 be approved then I felt that there were the
- 9 potential for a court appeal that would invalidate
- 10 that rate and perhaps, perhaps create a retroactive
- 11 increased requirement under what I understand to be
- 12 the current statutes, my non-legal understanding of
- 13 that, or if it were approved and there was a
- 14 subsequent fuel adjustment proceeding that raised
- 15 the question of prudency of flowing the costs
- 16 associated with serving the wholesale customer of
- 17 this magnitude through the FAC I thought there was
- 18 a potential for a disallowance and perhaps a
- 19 retractive refund. Those were the risks that we
- 20 outlined to Noranda. Now what other risks they may
- 21 have taken into account or how they may have
- 22 appraised that in their interface with Ameren I do
- 23 not know, I was not present for those discussions.
- 24 Q. Okay.
- 25 That's all I have thank you. Thanks

Page 2661 for your time. 2 COMMISSIONER KENNEY: No questions. 3 Thank you. 4 JUDGE WOODRUFF: Mr. Hall? 5 EXAMINATION OUESTIONS BY COMMISSIONER HALL: 7 Good afternoon Mr. Brubaker. Q. Good afternoon. 8 Α. Let me start with probably a pretty Q. 10 easy question and maybe one that -- well. Why does 11 Noranda recommend the creation of a new rate class, 12 the SAS rate class? Why not just change the rate 13 design on the existing LTS? 14 Certainly you could do that. Α. The 15 basis for the recommendation was to have a place to go back to at the end of the contract period. 16 17 Ο. Okay. Exhibit 534, you show, this is, contains your computations, correct? 18 19 Α. Yes, sir. 20 This shows the amount of adjustment 21 at the \$34 rate as being 16.584 million, is that 22 correct? 23 That is correct, yes. 24 Q. Okay. So if you combined that with 25 the elimination of the FAC what we are essentially

Page 2662

- 1 talking about is a 35.1 million subsidy, is that
- 2 correct?
- 3 A. The difference is 33.2 million on
- 4 page 1 of schedule 9.
- 5 Q. Pardon me?
- A. Page 1 of schedule 9 it's 33.2
- 7 million, or 1.2 percent overall.
- 8 Q. Well the, in your direct testimony
- 9 you said that the elimination of the FAC would be
- 10 **18.5 million.**
- 11 Q. And that was correct at that time.
- 12 The fuel adjustment has subsequently decreased so
- 13 just to set the predicate there are two differences
- 14 in 534 from the filed testimony, one is the level
- of the rate, the \$34 dollars versus 32.50 and the
- 16 other is to reflect the decrease in the FAC from
- 17 what it was at the time the testimony was filed to
- 18 today.
- 19 Q. So the total subsidy you said would
- 20 be 33.2 as shown on, I guess this is page 9?
- 21 A. Page 2 of schedule MEB dash COS dash
- 9. Actually page 1. Pardon me.
- 23 Q. Page 1. 33.2.
- A. 33.2. That's the deviation below the
- 25 any allocated embedded cost of service.

Page 2663

- 1 Q. Okay. On page 43 of your direct
- 2 testimony you discuss the justification for a load
- 3 retention rate and you say on line 6 the basis for
- 4 such a rate is typically a price at or above
- 5 incremental costs. What is the incremental cost?
- 6 A. In this context the costs that we
- 7 have evaluated are test year costs and my colleague
- 8 Mr. Dauphinais who appears next can give you all
- 9 the details for how he got those numbers but we
- 10 believe they range from \$28.03 a megawatt hour to
- 11 \$39.39 a megawatt hour.
- 12 Q. All right.
- 13 A. It's really the change in what
- 14 happens at the margin if the load were not served.
- 15 It's a combination of what the power would fetch in
- 16 the open marked were it sold on the open market
- 17 rather than to Noranda plus any savings in the
- 18 transmission and other charges that would be
- 19 voided.
- 20 Q. Later on that same page you calculate
- 21 at lines 12 and 13 you calculate the net revenue
- 22 loss if the smelter were not served to be
- 23 approximately 54 to 60 million per year. That
- 24 would be a reduction in revenues to Ameren.
- 25 A. You could look at it that way. It's

Page 2664

- 1 the, reflects the loss of what they would get --
- Q. The reduction in some of their costs,
- 3 there's a greater reduction if their revenues, the
- 4 difference is between 54 and 60 million.
- 5 A. That's right, yes.
- 6 Q. Okay. What are you assuming would
- 7 happen in that calculation to the electricity that
- 8 Ameren was selling Noranda?
- 9 A. The assumption is that it would be
- 10 sold in the MSO market.
- 11 Q. And what would happen to the revenues
- 12 from those sales in this calculation?
- 13 A. They would flow ultimately through
- 14 the fuel adjustment clause.
- 15 Q. Back to customers.
- 16 A. Back to customers, right.
- 17 Q. So when you are determining what the
- 18 percentage increase to customers 2.1 to 2.22 you
- 19 are assuming that 95 percent of all those, of those
- 20 offsets in sales are going back to customers and
- 21 they're still getting a two percent rate increase?
- 22 A. That's correct.
- 23 Q. Your, what is your understanding of
- 24 the N factor and whether or not those off system
- 25 sales proceeds would in fact go back to Ameren

Page 2665

- 1 customers? Under the current FAC.
- 2 A. I'm trying to remember how that is
- 3 worded. I think, I guess it depends on when it
- 4 happens, whether it happens, it's accounted for in
- 5 a rate case or whether it happens in between rate
- 6 cases.
- 7 Q. Exactly. Explain both to me.
- 8 A. Okay. If it happens in a rate case
- 9 you approve a new rate and then I think what you
- 10 see on schedule a COS 8 is what you would get.
- 11 Q. If it happened prior to a rate case.
- 12 A. Then I think Ameren would be
- 13 permitted to retain part of the lost revenues under
- 14 the N factor provision of the FAC.
- 15 Q. So the impact on customers would be
- 16 higher than this.
- 17 A. It would be, yes.
- 18 Q. Any idea how much, ball park?
- 19 A. No.
- 20 Q. On page 35 of your direct you give a
- 21 full throated argument in support of cost of
- 22 service rate making. I was wondering if you could
- 23 explain why you believe the cost of service rate
- 24 making is the, is the appropriate way to set rates.
- 25 Q. Yeah, that's always been pretty much

Page 2666

- 1 my outcome and my philosophy and my testimony, I
- 2 think it sums up as equity, conservation and
- 3 engineering efficiency are the primary bases,
- 4 primary reasons for going to cost of service under
- 5 normal circumstances.
- 6 O. Under normal circumstances.
- 7 A. Right.
- 8 Q. Have you performed a calculation on
- 9 the cost of, on the cost to serve Noranda or is
- 10 that a different witness?
- 11 A. No, that would be me.
- 12 Q. Okay. Where is that calculation in
- 13 here?
- 14 A. I think it's in the data response.
- 15 Q. So it's not in your testimony?
- 16 A. No, we see the rate of return in the
- 17 testimony as to the, well I did the rate of return
- 18 at present rates. The calculation that I did make
- 19 said that Noranda was about four percent below full
- 20 embedded cost to service currently.
- Q. And so do you know what that rate is,
- 22 four percent below the current rate, do you know
- 23 what that is?
- 24 A. Current rate is about --
- 25 **Q. 37?**

Page 2667 37.95, say \$38, so four percent of 38 1 Α. 2 is what, \$1.60. 3 Q. All right. COMMISSIONER HALL: No further 4 5 questions. Thank you. 6 JUDGE WOODRUFF: Mr. Rupp? 7 EXAMINATION QUESTIONS BY MR. RUPP: 8 9 Q. Good afternoon. 10 Good afternoon. Α. 11 Following up on a question that the Q. 12 Chairman had about the risks that you identified 13 with going to the wholesale market, the risks of 14 being a court challenge, you know, to the contract 15 and everything, if the general assembly were to 16 pass some type of legislation that would 17 specifically allow the Commission and parties to enter into those types of contracts would that 18 19 mitigate that risk of a court challenge? 20 Α. I presume that it would. 21 Was there any considerations to your 22 knowledge between the parties of Ameren and Noranda 23 on this issue of if they came to an agreement on a 24 contract and dollar amount of presenting a unified 25 front to the legislature and asking for some type

Page 2668

- of legislation that would provide them more comfort
- with mitigating that risk?
- 3 A. I don't know.
- 4 Q. Thank you.
- 5 JUDGE WOODRUFF: All right. Any
- 6 recross based on questions from the bench?
- 7 Begin with Public Counsel.
- 8 RECROSS EXAMINATION
- 9 QUESTIONS BY MR. ALLISON:
- 10 Q. Mr. Brubaker, how are you?
- 11 A. Good, thanks.
- 12 Q. Commission Hall asked you some
- 13 questions about Exhibit 534. I'm wondering on
- 14 page, well it's I guess schedule 9, page 1, I just
- 15 want to make sure I'm reading this correctly and if
- 16 you can confirm this for me. So the total overall,
- or average, I guess I should say the total average
- impact 1.32 percent, is that correct?
- 19 A. Correct.
- Q. Okay. And just going through this
- 21 classified class if you can confirm for me based
- 22 upon your calculations the residential class impact
- would be 1.15 percent, is that correct?
- A. That's correct.
- 25 Q. And then the small general service

Page 2669 impact goes up to 1.18 percent, is that correct? 2 Α. That is correct. 3 Q. Large general service impact then goes up to 1.29 percent, is that correct? 4 5 Α. Yes. 6 Ο. And that's an increase of 11/10ths of 7 one percent, is that not right? I'm sorry? 8 Α. 9 Q. 11/100ths of one percent I guess, not 1/10ths, that's ridiculous. 11 points, it goes up 10 11 11 points between 1.18 and 1.29, correct? 12 Α. 11/10ths of one percent. 13 Q. Thank you. 14 Small primary service 1.39 percent. 15 Α. 1.38 percent. 16 Or 38 percent, I'm sorry. Q. 17 Α. Yes. 18 And that would be an increase over Q. 19 large general service, is that correct? 20 It would. Α. 21 And then large primary service is 1.5 22 percent, is that correct? 23 Α. That's correct. 24 Q. And help me understand the classes 25 for a second. The large primary service class is

Page 2670

- 1 generally composed of what type of customer?
- 2 A. Medium to large manufacturing with
- 3 demands in excess of 5,000 kilowatts of load.
- 4 Q. Okay. And then the lighting class is
- 5 point 92 percent?
- 6 A. That's right.
- 7 Q. And then there's a de minimis impact,
- 8 what I would characterize as a de minimis impact on
- 9 the Metropolitan Sewer District, is that correct?
- 10 A. That's correct.
- 11 Q. Let me just take one second and look
- 12 here.
- 13 The FAC, again your original direct
- 14 testimony had calculated the FAC impact of
- 15 Noranda's request at being as I recall somewhere
- around 18 million, is that correct?
- 17 A. That's right. 18, almost 18.5
- 18 million.
- 19 Q. 18.5 million. And because of a
- 20 normal, I won't say normal but a periodic
- 21 adjustment in the FAC the impact is now reduced to
- 22 16.6 million, is that right?
- 23 A. That's right.
- 24 Q. Okay.
- MR. ALLISON: I don't have any

		Page 2671
1	further questions. Thank you.	
2	JUDGE WOODRUFF: MECG?	
3	MR. WOODSMALL: Yes Your Honor.	
4	RECROSS EXAMINATION	
5	QUESTIONS BY MR. WOODSMALL:	
6	Q. Since it sounds like Exhibit 54 is	
7	going to be put into evidence I will ask some	
8	questions about that. And I'll try to be brief.	
9	Looking at page 1 of your COS 9 of	
10	Exhibit 534, do you have that?	
11	A. Yes, I do.	
12	Q. And column H you identify, you	
13	quantify the total subsidy is 33.21 million, is	
14	that correct?	
15	MR. DOWNEY: Where are you David?	
16	MR. WOODSMALL: Page 1 of MEB-COS	
17	dash 9, column 6.	
18	MR. DOWNEY: I thought you said	
19	column 8.	
20	MR. WOODSMALL: I'm sorry.	
21	Q. (BY MR. WOODSMALL) Column 6 the	
22	total subsidy is 33.21 million, is that correct?	
23	A. Right. Current difference from	
24	current rates.	
25	Q. Okay. And just to clarify you said	

Page 2672

- 1 previously in response to a question from
- 2 Commissioner Hall that that was quote, the
- 3 deviation below any allocated embedded cost of
- 4 service. That's not correct, is it?
- 5 A. I can't, any embedded cost of service
- 6 would be about four percent higher.
- 7 Q. Okay.
- 8 A. On the base rate revenue column.
- 9 Thank you.
- 10 Q. So this is \$33 million below that
- 11 four percent, is that correct?
- 12 A. That's correct.
- 13 Q. Okay. Now that 33 million is the
- 14 impact of the nonunanimous stipulation, is that
- 15 correct?
- 16 A. That's right. It would be about 34
- 17 million with the four percent adjustment, but yes,
- 18 that's right.
- 19 Q. Okay. Now, going to the page before
- that, MEB-COS dash 8, again looking at column 3,
- 21 the 48 month average that staff proposed, you would
- 22 agree that the impact on customers if Noranda
- 23 closed is 42.698 million, is that correct?
- 24 A. If that's the number I would disagree
- 25 with your characterization of that number being

Page 2673

- 1 what staff proposed in this case. That's the
- 2 number that staff proposed in a prior case and I
- 3 believe staff has a different number in this case.
- 4 Q. Okay.
- 5 A. Although like other parties all of
- 6 it's put in several different numbers.
- 7 Q. Okay. Would you agree subject to
- 8 check that the difference between that 42.698 and
- 9 33.21 million is \$9.5 millions?
- 10 A. Sounds about right.
- 11 Q. Okay. Now, again that is without any
- 12 consideration of a revenue requirement increase in
- 13 this case, is that correct?
- 14 A. It is.
- 15 Q. Okay. Can you tell me if a revenue,
- 16 if the revenue requirement is increased in this
- 17 case and applied equal percentage across the board
- 18 what percent would Noranda get? I believe it's
- 19 five and a half percent, is that correct?
- 20 A. You're talking Noranda's base rate
- 21 revenue in percentage of the total.
- 22 Q. Right.
- 23 A. That's about right.
- Q. Five and a half percent. So, and I
- 25 believe that according to the fuel stipulation that

Page 2674

- 1 was filed earlier that calls for an increase in
- fuel costs of 103 million, is that correct?
- 3 A. Sounds about right.
- 4 Q. Okay. 103 million and that doesn't
- 5 count any other increase they may get in base
- 6 rates, is that correct?
- 7 A. Or decreases, some parties I believe
- 8 are suggesting that the overall increase should be
- 9 less than the amount that's attributable to fuel.
- 10 Q. Okay. Just for purposes of my
- 11 calculation assuming Ameren was to receive \$150
- 12 million rate increase.
- 13 A. You're generous.
- 14 Q. I hope you're right, yes. But it
- 15 makes for a nice round number. And you gave five
- and a half percent is what you said earlier would
- 17 be Noranda's share, would you accept that that is
- 18 **\$8.25 million?**
- 19 A. Yes.
- 20 Q. Okay. So you said earlier that the
- 21 difference between the 42.7 million and 33 million
- is \$9 million, is that correct?
- 23 A. It is.
- Q. Okay. So that \$9 million
- 25 differential will be reduced if not eliminated as a

Page 2675

- 1 result of the revenue requirement increase
- 2 authorized in this case, is that correct?
- 3 A. If you focus your numbers on the 48
- 4 month average which I've suggested is not the right
- 5 number that would be true.
- 6 Q. Okay.
- 7 No further questions, thank you.
- JUDGE WOODRUFF: Staff?
- 9 MR. THOMPSON: Thank you Judge.
- 10 CROSS EXAMINATIONQUESTIONS BY MR. THOMPSON:
- 11 Q. You may have answered this but you
- were asked questions about Exhibit 534 by
- 13 Commissioner Hall looking at the first page, line
- 14 5, that number 16.584, that doesn't take account of
- any revenue requirement increase in this case,
- 16 correct?
- 17 A. Correct.
- 18 Q. Okay. So in reality it would be
- 19 higher.
- 20 A. As a function of whatever increase
- 21 the company may get.
- 22 Q. Now, you were asked questions about
- 23 risks by Commissioner Rupp, do you recall? And was
- 24 the risk that Noranda was trying to avoid the risk
- 25 that it would have to pay the difference between a

Page 2676

- 1 wholesale rate and Ameren Missouri's wholesale
- 2 costs of power?
- 3 A. I don't know how that would have come
- 4 out looking at the structure though there was a
- 5 perceived risk not only of nonimplementation of the
- 6 rate, there was a wholesale rate that also as I
- 7 discussed with Commissioner Rupp. What might
- 8 happen later on and what the outcome of that would
- 9 be I don't know.
- 10 **Q.** Okay.
- 11 A. But there was definitely a perception
- 12 of risk.
- 13 Q. Under your FAC proposal would 95
- 14 percent of that risk go to ratepayers?
- 15 A. No, I don't know that it would. It
- 16 really depends on the circumstances of what kind of
- 17 disallowance or adjustment might be ordered.
- 18 Q. Okay. Now, your proposal, both the
- 19 one that you originally filed and the one in the
- 20 stipulation and agreement, both of those include or
- 21 both of them provide do they not that Noranda will
- 22 not be subject to the FAC.
- 23 A. That's correct.
- Q. And isn't it true that the FAC is
- 25 adjusted every six months?

Page 2677

- 1 A. Four months I think. Every four.
- 2 Q. Okay. Every four months, thank you.
- 3 I stand corrected. So how many four month periods
- 4 are there in 10 years?
- 5 A. 30.
- 6 Q. Would you agree there are 30? So
- 7 there would be 30 FSC rate adjustments that Noranda
- 8 would be exempted from.
- 9 A. Yes. Unless the rate is, the rate is
- 10 subject to continuous review by the Commission in
- 11 each rate case so unless, and it could be that the
- 12 Commission would make some change in that in some
- 13 future rate case, so, you know, whether that would
- 14 extend for a 10 year period of time I think is, may
- 15 not.
- 16 Q. Okay. Would you agree with me that
- 17 the costs that go through the FAC are real costs
- 18 that Ameren has to pay?
- 19 A. I think they're hard dollar costs,
- 20 yes. I don't know that there's anything other than
- 21 that that's in there.
- 22 Q. Okay. And --
- 23 A. There are some revenues that offsets
- 24 a net number but they're all hard costs.
- 25 Q. I understand. Taking into account

Page 2678

- 1 the fact that it's a net number if Noranda is
- 2 exempt from the FAC then who, if you know or have
- 3 an opinion, who will be picking up those costs that
- 4 Noranda's not paying?
- 5 A. Other customers.
- 6 Q. Thank you. No further questions.
- JUDGE WOODRUFF: For Ameren.
- 8 CROSS EXAMINATION
- 9 QUESTIONS BY MR. LOWERY:
- 10 Q. Mr. Brubaker you may have already
- 11 said this but I wanted to expand on it a little
- 12 bit. All of the these figures, this \$33 million
- 13 figure which actually if you want to look at it on
- 14 a, even a current cost of service, current rates
- 15 are as I see four percent too low but \$33 million
- 16 figure, this 1.23 percent, all of the percentages
- 17 for each of the rate classes none of them take into
- 18 account any increase that might be granted in this
- 19 case or in any future case, isn't that right?
- A. That's correct.
- Q. And in fact all of these analyses,
- 22 they don't take into account or make any attempt to
- 23 predict what the opportunity cost of having Noranda
- 24 on the system versus off the system in the future
- will actually be, isn't that right?

Page 2679

- 1 A. My colleague Mr. Dauphinais who
- 2 appears next has taken that into consideration in
- 3 ways that you can ask him about in coming up with
- 4 the 28 and \$29 numbers for the near term.
- 5 Q. Well I'm going to ask you a few
- 6 questions about it and if you know you can tell me
- 7 and if you don't know then you'll have to tell me
- 8 this too. But I suspect you know something about
- 9 this. Mr. Dauphinais' 28 or \$29 figures that you
- 10 cited, he calculated those using historical
- 11 information, he may have adjusted the historical
- 12 information in certain ways but he used historical
- 13 information, isn't that right?
- 14 A. He use historical, that's correct.
- 15 Q. He didn't use forward energy prices
- or forward capacity prices or other forecasts in
- order to calculate those numbers, isn't that right?
- 18 A. I think when you read his testimony
- 19 you'd see that he considered that and addressed
- 20 that, has addressed that issue.
- 21 Q. He considered it but he didn't
- 22 actually take any dollar figure for any of those
- 23 parameters from the future and perform calculations
- 24 to come up with that 28 or \$29 that you mentioned,
- 25 **did he?**

Page 2680

- 1 A. He considered it and he doesn't
- 2 adjust them for reasons he has explained in his
- 3 testimony.
- 4 Q. But my simple question is he may have
- 5 considered using future information, he may have
- 6 reasons for why he didn't actually use those
- 7 dollars in the future but he didn't actually use
- 8 any future dollars in calculating the 28 or \$29,
- 9 isn't that right?
- 10 A. And my response to you would be yes
- 11 because he didn't think it was necessary.
- 12 O. I understand I didn't think it was
- 13 necessary. But as we just discussed none of us
- 14 know what the future's going to bring, do we?
- A. We do not.
- 16 MR. LOWERY: I don't have any further
- 17 questions Your Honor.
- JUDGE WOODRUFF: Redirect?
- 19 REDIRECT EXAMINATION
- 20 QUESTIONS BY MR. DOWNEY:
- Q. Let's just work backwards Mr.
- 22 Brubaker.
- Do you know why Mr. Dauphinais didn't
- 24 think it was necessary?
- 25 A. I would have to try to summarize his

Page 2681

- 1 testimony.
- 2 Q. That's fine. But Mr. Dauphinais did
- 3 also consider future forward energy prices?
- 4 A. It's my understanding he considered
- 5 those in arriving at his recommendations.
- 6 Q. Okay. And would you explain to the
- 7 Commission how the base rates rebase fuel costs in
- 8 a rate case?
- 9 A. Typically when you have a rate case
- 10 there's some increase or decrease, lately it's been
- 11 an increase in fuel costs and that gets folded into
- 12 the new base rate so I think Mr. Thompson
- 13 mentioned 100 million, or Mr. Woodsmall perhaps
- 14 mentioned \$100 million fuel cost that will be
- 15 folded into base rates in this case and in
- 16 subsequent cases as well. So it's not all hanging
- out of the FAC, it gets somewhat escalated each
- 18 time there's a rate case.
- 19 Q. Okay. Do you happen to know in the
- 20 nonunanimous stip whether the proposal is for
- 21 Noranda to pay a certain percentage of base rate
- 22 increases?
- 23 A. Yes, I do. It's 50 percent of the
- 24 otherwise applicable system average increase.
- 25 Q. So if fuel costs go up between rate

Page 2682

- 1 cases what would happen then in terms of rebasing
- 2 and its impact on Noranda? Under the stipulation.
- 3 A. In part it would be reflected in
- 4 increase of the base revenue, base rates for
- 5 Noranda.
- 6 Q. So if I understand correctly Noranda
- 7 would pay increased costs of fuel once they're, the
- 8 increased costs are rebased. In base rates.
- 9 A. They would pay 50 percent of whatever
- 10 the increase is including fuel and non fuel.
- 11 Q. Okay. I'm sorry, 50 percent of that.
- Now, you understand the Commission
- 13 retains control over rates?
- 14 A. That's my understanding, yes.
- 15 Q. And one commission can not bind
- 16 future commissions?
- 17 A. I've been told that, yes.
- 18 Q. Do you think that's true?
- 19 A. I believe it is.
- 20 Q. Now, it's my understanding that your
- 21 testimony supported a rate of \$32.50 for Noranda?
- 22 A. It did.
- Q. And was that, it was your testimony
- 24 that that rate was better for the other ratepayers
- 25 than if Noranda shut down?

Page 2683

- 1 A. Yes.
- 2 Q. And would you explain why?
- 3 A. Based on the analysis, the comparison
- 4 between what they had gotten for the power if it
- 5 were sold in the wholesale market plus any savings
- 6 and costs that number was bigger than the reduction
- 7 in rates for Noranda versus their current rates.
- 8 So it was a question of which way are you better
- 9 off, how much, how many dollars of increase would
- 10 the other customers face with Noranda at a lower
- 11 rate versus no Noranda and in our evaluation
- 12 ratepayers would see a higher rate without Noranda
- 13 than they would under the Noranda served at a lower
- 14 price.
- 15 Q. And if the Commission were to adopt
- 16 the \$34 proposal would your opinion be the same as
- 17 far as it benefits ratepayers versus Noranda
- 18 leaving the system?
- 19 A. It would be a larger benefit.
- 20 Q. And if the Commission adopted a rate
- 21 that is even higher than \$34 would the benefit also
- 22 increase?
- 23 A. Yes.
- Q. In your opinion as an expert is the
- 25 stipulated rate a just and reasonable rate and

Page 2684 benefit to ratepayers versus Noranda shutting down? 2 MR. LOWERY: I'm going to object as 3 these questions are beyond the scope of any questions that came from any cross examination. 4 5 JUDGE WOODRUFF: I'll overrule the 6 objection. You can answer. 7 Yeah, I think it's a fair, would be a fair and reasonable outcome. 8 9 **Q**. (BY MR. DOWNEY) Okay. And -- never 10 mind. 11 And you're familiar with the 12 conditions in the stipulation, are you not? Yes, generally. 13 Α. 14 Q. Is there a condition on liquidity? 15 A. There are conditions on liquidity. 16 Q. Is there a condition on retaining 17 employees? Α. 18 Yes. 19 Q. Is there a condition on capital 20 expenditures? 21 Α. There is. 22 Q. Is there a condition on special 23 dividends? 24 A. There is. 25 And what is that condition? **Q**.

Page 2685 1 Α. That there won't be any. 2 Q. Did you see my opening statement 3 earlier this week? I did. 4 Α. 5 There was a slide where I, a couple Q. of slides where I set out the conditions, do you 7 recall that? T do. 8 Α. 9 Q. And was that slide accurate to the 10 conditions? I'm asking you because I may have 11 forgotten some. 12 As I remember it was. I don't remember all the lines on it but there were a 13 number of conditions and I believe that they were all reflected. 15 16 Q. Do you know whether those conditions 17 were negotiated to protect ratepayers? 18 Α. That was the purpose of them, yes. 19 Q. All right. And do you believe that 20 stipulated rate with those conditions is a just and 21 reasonable rate? I think the rate is just and 22 reasonable, I did not participate in negotiated 23 24 conditions. 25 Q. And again that's with the assumption

Page 2686

- 1 that Noranda would close the smelter without a
- 2 reduced rate.
- 3 A. That's the comparison, that's
- 4 correct.
- 5 Q. Now, you had some questions from Mr.
- 6 Thompson on the risk of the wholesale deal. Do you
- 7 recall that?
- 8 A. I do.
- 9 Q. And you may have had discussion with
- 10 other either commissioners or lawyers but does part
- 11 of that risk have to do with having Ameren Missouri
- 12 build the costs, the fixed costs of providing power
- 13 under that wholesale rate in base rates to
- 14 ratepayers?
- 15 A. I mean I think that got to some of
- 16 the issues, this was a departure from normal
- 17 practices and we were concerned about that.
- 18 Q. And did you happen to read the
- 19 testimony of OPC witnesses and Staff witnesses on
- 20 the wholesale proposal?
- 21 A. I did.
- 22 Q. And is it fair to say they opposed
- 23 the wholesale deal?
- A. That's fair to say, they certainly
- 25 did.

Page 2687

- 1 Q. Though there was a lot of discussion
- 2 I think with Mr. Woodsmall about page MEB-COS 8 in
- 3 Exhibit 534 regarding this 48 month average?
- 4 A. Yes.
- 5 Q. And I believe you testified that you
- 6 don't believe that is a good way to determine
- 7 incremental costs, paraphrasing. Do you recall
- 8 that?
- 9 A. Yes, I do.
- 10 Q. Would you explain to the Commission
- 11 why?
- 12 A. We thought it was not representative
- 13 to have the polar vortex in there and use a four
- 14 year average. In calculating test year data in
- 15 this case every party that did it including Staff
- 16 and Ameren and MIEC removed the effects of the
- 17 polar vortex just because they're abnormal and we
- 18 thought why should we evaluate our rate proposal on
- 19 something that everybody else has already concluded
- 20 isn't representative so for that reason I don't
- 21 think that column is the primary basis that should
- 22 be used for evaluation.
- 23 Q. Now, you were asked some questions
- 24 about I believe page 35 of your direct testimony.
- 25 **Q. Yes.**

Page 2688

- 1 A. And I believe you stated that under
- 2 normal circumstances you are in favor of cost of
- 3 service rate making, do you recall that?
- 4 A. Embedded cost of service rate making,
- 5 that's right.
- 6 Q. And I know you keep correcting the
- 7 lawyers on our use of cost of service and you say
- 8 embedded cost of service, what's the difference?
- 9 A. Well, embedded cost of service is
- 10 just an allocation of all the elements that are
- 11 added together to get the utility's total revenue
- 12 requirement. And the other cost of service is the
- incremental analysis which says given two options
- 14 what are the outcomes of the two options looking
- 15 just at the costs involved in the two options.
- 16 Q. Thank you.
- Would you, what is your opinion on
- 18 whether this request of Noranda Aluminum would be
- 19 considered normal circumstance?
- 20 A. I think it's not, it's unusual.
- 21 Compared to the normal embedded cost rate making
- 22 but certainly when you look around the country
- 23 there are a lot of rates of this kind that are set
- lower than any fully embedded costs but above
- 25 incremental costs for the same reason we're

Page 2689

- 1 suggesting it makes sense here, it's better off to
- 2 keep the customer at a lower rate than to lose the
- 3 customer and have all the power that otherwise
- 4 would have been sold to the customer sold in the
- 5 wholesale market at a lower price which would
- 6 thereby cause the rates of the other customers to
- 7 increase more than they would increase under the
- 8 special incremental costs based rate for Noranda.
- 9 Q. Is the size of the Noranda load one
- 10 factor in your opinion that it's not a normal
- 11 circumstance?
- 12 A. It's certainly a very large load and
- 13 has to be looked at I think on its own differently
- 14 than perhaps we look at other loads.
- 15 Q. Do you have an opinion whether the
- 16 incremental cost to serve Noranda between now and
- 17 the time, the likely time of the next rate case,
- 18 assume that to be three years or less will be below
- 19 \$32.50 per megawatt hour?
- 20 A. I would have to rely on Mr.
- 21 Dauphinais for that judgment.
- 22 Q. And do you respect his opinion?
- 23 A. I do.
- Q. And is his opinion that it is less
- 25 than 32.50?

Page 2690 A. It is. 1 2 Is his opinion also that it's less 3 than \$34 per megawatt hour? A. If it's less than 32.50 it's less 4 than 34. 5 6 Q. I asked for that. And thank you for 7 giving it to me. I appreciate the obvious questions. 8 Α. 9 Q. Have you any explained Exhibit 534 10 and its calculations? A. I think so. 11 12 MR. DOWNEY: Judge I would offer Exhibit 534. 13 14 JUDGE WOODRUFF: 534 has been 15 offered. Any objections? 16 Hearing no objections it will be 17 received. 18 MR. DOWNEY: I'm not quite finished 19 Judge, give me just a second. 20 That's all we have. Thank you. 21 Α. Thank you. 22 JUDGE WOODRUFF: Then you can step down Mr. Brubaker. 23 24 A. Thank you. 25 JUDGE WOODRUFF: And it's nearly

		Page 2691
1	5 o'clock so we'll go ahead and stop for tonight,	
2	we'll resume tomorrow morning at 8:30 hopefully	
3	with the air-conditioning working.	
4		
5		
6	(Whereupon, the hearing concluded at 4:50 p.m.)	
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

		Page 2692
1	INDEX	
2		
3	KIP SMITH	
4	Redirect Examination/Mr. Mallin	2464
5		
6	DALE WAYNE BOYLES	
7	Direct Examination/Mr. Mallin	2492
8	Cross Examination/Mr. Nelson	2495
9	Examination/Chairman Kenney 2586	
10	Examination/Commissioner Hall	2593
11	Examination/Commissioner Rupp	2610
12	Cross Examination/Mr. Thompson	2626
13	Recross Examination/Mr. Nelson	2629
14	Redirect Examination/Mr. Mallin	2631
15		
16	JOSEPH HALAG	
17	Direct Examination/Ms. Iles 2656	
18		
19	STEVEN SPINNER	
20	Examination/Chairman Kenney 2667	
21	Examination/Commissioner Kenney	2669
22	Examination/Commissioner Hall	2671
23	Cross Examination/Mr. Lowery	2672
24		
25		

		Page 2693
1	COLIN PRATT	
2	Direct Examination/Mr. Mallin 2673	
3	Examination/Commissioner Hall 2676	
4		
5	THOMAS HARRIS	
6	Direct Examination/Ms. Iles 2679	
7		
8	HENRY FAYNE	
9	Direct Examination/Ms. Iles 2682	
10	Cross Examination/Mr. Woodsmall 2683	
11	Cross Examination/Mr. Mitten 2690	
12	Examination/Commissioner Hall 2692	
13	Examination/Commissioner Rupp 2718	
14	Recross Examination/Mr. Woodsmall 2719	
15	Recross Examination/Mr. Thompson2720	
16	Recross Examination/Mr. Mitten 2723	
17	Redirect Examination/Ms. Iles 2727	
18		
19	MORRIS BRUBAKER	
20	Cross Examination/Mr. Woodsmall 2734	
21	Cross Examination/Mr. Thompson 2741	
22	Cross Examination/Mr. Lowery 2744	
23	Examination/Chairman Kenney 2747	
24	Examination/Commissioner Hall 2749	
25	Examination/Commissioner Rupp 2755	

				Page 2694
1		Recross Examination/Mr. Allison	2756	
2		Recross Examination/Mr. Woodsmal	.1 2759	
3		Recross Examination/Mr. Thompson	12763	
4		Recross Examination/Mr. Lowery	2766	
5		Redirect Examination/Mr. Downey	2768	
6				
7				
8		EXHIBITS		
9	MIEC			
10	503	Brubaker direct testimony	2732	
11	504	Brubaker rebuttal testimony 2	2732	
12	505	Brubaker surrebuttal testimony	2732	
13	532	Liquidity chart	24642471	
14	533	12/31/14 Noranda 10K 2462 247	'9	
15	534	Brubaker recalculation chart	2728	
16	600HC/	/NP Boyles direct testimony	2493 2494	
17	601 H	C/NP Boyles surrebuttal testimony	2493 2494	
18	602	Fayne direct testimony	2682	
19	603	Fayne rebuttal testimony	2682	
20	604	Harris direct testimony	2680 2680	
21	605	Harris rebuttal testimony	2680 2680	
22	606	Haslag direct testimony	2657 2658	
23	607	Haslag surrebuttal testimony	2657 2658	
24	608	Pratt direct testimony	2674 2675	
25	609	Pratt rebuttal testimony	2674 2675	

					Page 2695
1	AMEREN	I			1 age 2093
2	69	Boyles Depo Ex. No. 3	2542	2544	
3	70	Boyles Depo Ex. No. 4	2542	2545	
4	71	Boyles Depo Ex. No. 5	2542	2546	
5	72	Boyles Depo Ex. No. 6	2542	2546	
6	73	2013 West Virginia order	2698	2698	
7					
8	MECG				
9	979HC	Comparison Costs For Electricity	2687	2698	
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

		Page 2696
1	REPORTER CERTIFICATE	
2		
3	I, SUZANNE BENOIST, Certified Shorthand	
4	Reporter, do hereby certify that there came before	
5	me at the Missouri Public Service Commission, 200	
6	Madison Street, Jefferson City, MO 65102, the	
7	above-referenced parties, that the proceeding was	
8	translated and proofread using computer-aided	
9	transcription, and the above transcript of	
10	proceedings is a true and accurate transcript of my	
11	notes as taken at the time of said event.	
12	I further certify that I am neither attorney	
13	nor counsel for nor related nor employed by any of	
14	the parties to the action in which this examination	
15	is taken; further, that I am not a relative or	
16	employee of any attorney or counsel employed by the	
17	parties hereto or financially interested in this	
18	action.	
19		
20		
21		
22	SUZANNE BENOIST, RPR, CCR, CSR-IL	
23		
24		
25		

A	accommodate	2506:13	advocating	2647:18 2651:5
<b>ability</b> 2477:21	2473:22	2555:16	2645:5	2654:13
2486:25	account 2660:21	2566:13 2584:6	<b>AEP</b> 2598:17	2672:22 2673:7
2487:16	2675:14	2584:7 2612:20	<b>affect</b> 2522:1	2677:6,16
2492:20	2677:25	2617:20	2566:14	<b>agreed</b> 2473:21
2561:18,21	2678:18,22	2626:21 2641:1	2637:11	2551:4,10
2562:1	accounted	Additionally	affiliation	2552:1,2
able 2465:15	2665:4	2584:21	2583:19	2574:2 2634:8
2470:23	accounting	<b>address</b> 2468:24	<b>afford</b> 2492:20	2642:14
2473:22	2483:6 2484:19	2478:22 2569:4	affordable	2646:22
2477:21	accounts 2619:20	2593:6 2649:6	2478:16,17,22	agreeing 2467:25
2492:20	2629:25	addressed	afternoon	agreement
2496:25 2554:9	accuracy 2505:6	2679:19,20	2550:15 2553:4	2467:21
2585:19	2505:19	adjust 2680:2	2553:5 2585:6	2468:14
2602:10,13	2606:12	adjusted 2615:4	2590:7,8	2549:24 2551:7
2612:14 2620:5	accurate 2508:15	2676:25	2592:6 2597:12	2574:14 2581:7
2660:6	2517:14	2679:11	2597:13 2604:3	2583:1 2614:24
abnormal	2555:21	adjustment	2623:8,9	2653:20 2654:5
2687:17	2590:15 2685:9	2616:21	2659:15,16	2667:23
above-referenc	2696:10	2651:20,24	2661:7,8	2676:20
2696:7	achieving 2564:1	2660:14	2667:9,10	agreements
<b>absent</b> 2521:3	acknowledge	2661:20	<b>agenda</b> 2549:5	2622:2 2660:1
2548:1,3	2497:15	2662:12	ago 2534:16	ahead 2468:8
2625:16	acquire 2608:13	2664:14	2581:14 2582:6	2507:21
<b>absolute</b> 2515:21	acquisition	2670:21	2586:23 2603:1	2600:13 2603:9
2547:24 2603:7	2562:3	2672:17	2603:9 2612:4	2644:10
2603:8 2606:1	acquisitions	2676:17	2659:6	2645:11 2691:1
2606:5 2649:21	2562:5	adjustments	agree 2488:15	aid 2478:23
absolutely	action 2696:14	2621:4 2651:8	2493:19 2497:7	<b>Aikman</b> 2484:5
2468:3,15	2696:18	2651:11,12	2499:16	2484:16
2522:4 2574:6	actions 2487:2	2677:7	2502:24	air 2475:23
2621:24 2636:4	activity 2560:11	admission	2505:18	2492:6 2493:9
2657:24	2562:3	2466:14 2481:3	2513:12 2517:5	air-conditioning
abundantly	actual 2477:4	2526:13 2527:7	2517:16 2519:4	2476:9 2691:3
2590:15	2497:16,19,22	2528:2,16	2520:14 2521:3	Alcoa 2614:25
acceleration	2509:9 2512:11	2571:22 2589:6	2521:21	2615:5,9
2640:22	2513:23	2596:25	2522:18	2628:13
accept 2470:18	2517:11 2560:3	2611:18	2525:20 2529:3	Alcoa's 2614:14
2592:25	2623:12 2653:4	admittance	2534:9 2535:24	alert 2463:13
2647:11	2658:8	2528:19	2536:2 2537:12	2531:4 2569:13
2674:17	added 2501:10	admitted	2544:10	ALEXANDER
accepting	2580:6 2583:8	2467:14	2598:18 2601:1	2462:15
2649:15	2688:11	2644:18	2604:16,23	<b>Allison</b> 2462:10
accepts 2649:11	addition 2526:22	adopt 2683:15	2606:17 2614:8	2481:12
access 2602:10	2637:5	adopted 2683:20	2619:16,18	2549:18,19,22
	additional	advances	2620:4,22	2551:11,18
accidentally	2473:24	2637:25	2621:15	2552:3,6
2604:6,6				2002.0,0

2572:5 2589:14	2521:9,13,15	2635:12 2639:4	2526:24	apiece 2558:12
2595:2 2597:7	2521:18	2642:8 2647:5	2528:12	<b>Apollo</b> 2477:3,11
2645:25 2650:6	2529:22	2654:16 2656:5	analyze 2491:4	2477:17 2478:6
2650:14,18	2531:21,24	2656:13	Anheuser	2478:20 2479:1
2668:9 2670:25	2532:18	2657:10	2580:12,14	2479:3 2485:6
2694:1	2533:14,19	2659:18,24	anniversary	2485:7,9
allocated	2534:3,14	2660:22	2652:10	2486:22,24
2549:20	2537:13 2542:3	2663:24 2664:8	announce 2549:3	2487:12,16
2638:11,14	2557:17	2664:25	announced	<b>Apollo's</b> 2487:7
2654:21,24	2560:25	2665:12	2474:1 2521:12	apologize 2464:3
2662:25 2672:3	2561:14,15	2667:22	annual 2490:11	2466:2 2467:17
allocation 2551:9	2580:16,17,19	2674:11 2676:1	2577:21 2613:4	2530:14 2559:3
2581:8 2646:13	2604:13	2677:18 2678:7	annually 2652:9	2569:22
2688:10	2607:12 2609:5	2686:11	anodes 2557:17	<b>apparel</b> 2482:16
allow 2576:10	2609:24 2610:1	2687:16 2695:1	<b>answer</b> 2468:8	apparent
2578:16	2610:22	AmerenUE	2478:10	2590:22
2579:19 2627:9	2611:25 2612:7	2461:11	2495:23	apparently
2634:22	2615:1,19	Ameren's	2498:23 2537:4	2569:15
2667:17	2617:12 2619:6	2516:14 2517:3	2537:8,11	2591:16
allowed 2523:23	2619:22	2551:16 2577:2	2541:6 2548:17	2640:14
2575:18	2620:14 2621:8	2584:2 2646:7	2577:9 2585:19	appeal 2626:14
2639:21	2623:13 2630:7	amount 2471:23	2608:2 2617:16	2660:9
allowing 2609:5	2631:10	2471:23 2539:5	2634:20 2651:4	appear 2517:14
all-in 2534:10,14	2688:18	2567:15 2584:3	2653:25 2684:6	2549:24 2551:6
2535:17 2536:4	Aluminum's	2592:14 2610:6	answered	2578:1 2611:16
2536:13,19	2609:3,16	2610:16	2575:15	APPEARANC
alternative	amended	2612:17 2613:4	2675:11	2461:1
2585:14	2550:17	2617:2,20	answering	appears 2525:23
2592:15,22	<b>Ameren</b> 2460:10	2641:1 2661:20	2608:23	2663:8 2679:2
<b>alumina</b> 2616:14	2461:11 2463:5	2667:24 2674:9	answers 2480:12	applicable
2616:19	2465:13	amounts 2612:15	2480:25 2535:8	2681:24
2620:13,20	2467:21	2621:25	2564:16	application
2621:1	2468:14,18	analyses 2678:21	2567:25	2651:16
aluminum	2469:3,14	analysis 2491:7	2571:16	applications
2462:2 2479:23	2470:1,13	2491:13,20,23	2588:23	2532:18
2482:25	2481:21	2492:7,11	2592:21	<b>applied</b> 2673:17
2483:22 2484:2	2551:22	2493:12	2594:17	apply 2497:16
2484:9,14,14	2552:22	2498:11,13,17	2596:22	2512:17
2485:2,24	2572:11 2584:4	2508:18 2510:5	ANTA 2462:15	2519:13,14
2488:16,20	2585:21 2586:3	2511:2 2512:18	anticipated	2585:20
2490:11,20	2589:22	2513:2,7,18	2579:8	<b>applying</b> 2512:14
2491:5,15,20	2595:10	2515:15	anticipating	appraised
2492:8,13	2603:18	2529:20	2573:9	2660:22
2508:9 2510:9	2604:18	2570:23 2683:3	anticipation	appreciate
2516:19	2605:13,18	2688:13	2644:1	2466:20 2467:8
2517:12,15	2617:11,25	analysts 2489:5	anybody 2463:24	2569:20 2587:8
2519:5 2520:13	2634:25	2525:22	2531:3	2592:24
1				

2593:15 2690:8	2609:16,21	2473:6 2475:5	2463:14	2656:5 2668:17
approach	2611:2,4,23	2478:5 2564:13	2549:12	2668:17
2485:17	2612:13,23	2652:14	2577:19,22	2672:21 2675:4
2534:18	2614:14 2615:5	2660:16	attributable	2681:24 2687:3
approached	2634:3	assume 2493:2,3	2674:9	2687:14
2636:9 2640:19	arrangements	2493:6 2496:25	audience 2549:4	<b>AVL</b> 2555:9
appropriate	2561:20	2498:5 2502:14	authority	avoid 2599:20
2613:22 2645:3	2615:19,24	2519:19 2534:7	2614:15,20	2613:14
2665:24	2616:6	2552:22	2624:21 2625:2	2675:24
approval	<b>arrived</b> 2582:13	2553:15	2625:7,8,10,15	aware 2490:10
2473:20	arriving 2491:5	2554:20	2625:19 2626:4	2515:23 2516:2
<b>approve</b> 2573:24	2681:5	2564:21,25	2626:8,11,17	2516:5 2517:8
2624:15,22	<b>Arthur</b> 2484:19	2586:4 2618:17	2626:21 2627:2	2519:17,25
2625:24 2665:9	aside 2635:3	2689:18	2627:17 2634:4	2523:19 2524:5
approved 2609:2	asked 2472:17	assumed 2510:9	2634:9,17	2524:6,7,13,15
2609:23	2477:3,25	2510:17	authorized	2552:11,13
2611:24	2478:9 2523:10	assuming 2492:9	2608:11 2627:5	2560:21 2593:2
2612:24	2523:19	2510:14	2639:12	2615:17,21
2625:15 2626:7	2528:13 2535:7	2620:19	2647:25 2675:2	2634:21 2635:1
2636:2 2660:7	2535:14	2621:12 2664:6	authorizes	<b>a.m</b> 2463:3
2660:8,13	2536:11 2544:8	2664:19	2637:4 2638:8	<b>A1</b> 2494:20
approving	2549:17	2674:11	automotive	2497:4 2499:7
2626:25	2550:19 2553:7	assumption	2484:7	<b>A2</b> 2494:20
approximately	2568:25 2585:7	2511:6,9	available	2495:15,16,24
2473:3,4	2586:5 2592:16	2539:20 2564:7	2469:18	2496:1 2499:7
2482:14	2602:12,15	2568:2 2657:12	2492:22 2493:8	2501:16
2483:17	2639:4,9	2664:9 2685:25	2515:25	<b>A3</b> 2494:20
2485:11 2505:8	2640:5,9,21	assumptions	2516:16 2573:3	2497:4 2499:7
2534:17 2557:7	2642:3 2668:12	2491:18 2498:7	2573:6 2574:18	
2557:9,11,20	2675:12,22	2500:10	2574:19 2598:4	B
2558:5,7,11,13	2687:23 2690:6	2510:24 2511:4	2602:17	<b>B</b> 2461:7
2580:21	asking 2505:25	2511:12	2613:10	back 2463:5,22
2605:12	2506:1 2530:18	2539:19	2630:19	2465:2 2472:9
2619:21	2530:21 2547:6	2562:17 2563:4	2655:12,22	2473:11 2476:3
2663:23	2582:8 2658:23	2564:3 2566:17	<b>Avenue</b> 2461:4	2476:8 2481:24
arbitrarily	2658:24	2652:24 2658:5	<b>average</b> 2491:24	2486:4 2517:21
2511:6 2513:24	2667:25	attached 2603:5	2493:22 2494:3	2519:2 2528:25
areas 2530:21	2685:10	attempt 2550:20	2494:4,23,24	2534:8 2535:5
<b>argue</b> 2629:18	assembly	2678:22	2494:25	2539:2 2540:1
argument	2613:13,21	<b>attended</b> 2559:21	2495:16 2496:6	2541:6 2543:17
2576:17	2614:6 2636:9	attention 2644:3	2496:8 2497:6	2546:12 2549:2
2665:21	2667:15	attorney 2461:7	2514:14	2549:5,8
<b>arising</b> 2561:25	assertion	2461:11,12,12	2605:13	2551:1 2552:18
arms 2499:17	2629:24	2462:3,6	2648:12,22	2556:1 2558:17
Armstrong	asset 2472:6,9	2635:8 2696:12	2649:4,7,13	2559:4 2574:20
2461:21	associated	2696:16	2651:2,3	2576:2 2583:1
arrangement	2469:25 2473:5	attorneys	2652:20,21	2586:15
	<u> </u>	<u> </u>	l	<u> </u>

		_	_	_
2591:24 2592:5	2591:7 2604:15	2608:7	2673:18,25	2650:3,23
2592:6 2599:14	2609:23	behaviors	2674:7 2682:19	2654:17
2603:1,11	2611:24 2615:4	2469:20,21	2685:14,19	2657:11
2608:20	2616:18	<b>belief</b> 2486:13	2687:5,6,24	2658:10
2612:11,15	2617:15	2502:21 2547:3	2688:1	2682:24 2683:8
2617:24	2625:18 2629:5	believe 2464:2	<b>believed</b> 2625:13	2689:1
2626:12	2631:21 2636:3	2466:24 2467:1	<b>believes</b> 2613:21	beyond 2477:24
2631:23	2641:16	2467:20 2468:1	bell 2602:25	2553:9 2557:22
2641:13	2643:22	2468:11 2469:3	bench 2542:19	2658:19 2684:3
2643:11,11	2644:24	2472:1 2477:19	2552:20	<b>bid</b> 2630:20
2661:16	2647:19,20	2485:21	2572:14	<b>big</b> 2471:6
2664:15,16,20	2648:11	2491:12,17	2579:10,12	2484:21
2664:25	2653:18	2495:20 2497:3	2586:2 2587:5	2608:17,18,20
<b>backed</b> 2472:6	2655:11 2656:8	2497:18 2499:8	2589:25 2591:8	2609:4
backwards	2656:22 2668:6	2501:9 2502:11	2595:13,23	bigger 2584:17
2680:21	2668:21 2683:3	2502:15,16	2622:19	2683:6
baked 2557:13	2689:8	2505:17	2631:22	<b>bill</b> 2555:14
<b>balances</b> 2638:14	bases 2666:3	2515:18	2645:18	<b>billion</b> 2580:16
<b>ball</b> 2665:18	<b>basic</b> 2628:9	2517:12,18	2659:11 2668:6	<b>billions</b> 2598:20
bank 2594:1	basically 2508:22	2519:23	beneficial	bills 2555:14
2628:18	2510:25 2530:2	2520:18 2521:5	2604:18	<b>bind</b> 2682:15
bar 2501:23	2608:17	2521:6 2522:4	<b>benefit</b> 2683:19	<b>bit</b> 2467:12,19
2514:25	2625:15	2523:14,22	2683:21 2684:1	2470:19
2625:22	2626:20	2527:6,24	<b>benefits</b> 2683:17	2472:16,24
bargaining	2628:16	2528:15	BENOIST	2476:10,11
2622:2	2629:18 2641:2	2533:18	2460:23 2696:3	2478:14,20
bars 2502:19	basis 2582:10	2537:14,20,24	2696:22	2481:24 2482:8
2506:16	2614:21	2541:25 2543:3	best 2469:2	2500:20
base 2612:17	2634:23	2545:22 2547:9	2486:12,14	2503:11
2616:13	2656:20	2550:21,23	2492:21 2493:7	2529:16,18
2629:24 2672:8	2661:15 2663:3	2554:7 2557:6	2498:3 2499:18	2537:21 2555:8
2673:20 2674:5	2687:21	2559:9 2561:1	2499:19	2557:3 2580:19
2681:7,12,15	bear 2642:17,19	2566:3 2568:9	2502:20,22	2678:12
2681:21 2682:4	becoming	2570:6 2576:2	2513:5 2514:9	<b>blessed</b> 2471:5
2682:4,8	2537:13	2582:21	2515:23,24	<b>blind</b> 2590:13,20
2686:13	<b>began</b> 2463:3	2584:15	2516:2,5,10,15	2657:21
<b>based</b> 2488:5	beginning	2586:13 2587:9	2517:2,6,6	<b>blue</b> 2495:15
2491:25 2492:1	2499:13	2591:14 2601:7	2519:22 2522:6	2496:7 2497:5
2493:7 2495:3	2569:18 2572:4	2606:3 2608:5	2522:8 2658:20	2501:24 2504:9
2495:4 2506:19	2575:18	2613:16,24	<b>bets</b> 2474:14	2506:15 2509:5
2506:23	2594:25 2597:5	2620:9,16	<b>better</b> 2472:13	2509:17
2509:11	2599:6 2609:1	2635:7 2643:8	2517:8 2520:1	2514:21 2515:2
2513:23 2516:3	2609:13	2644:7 2646:14	2593:11	<b>Blvd</b> 2461:21
2529:24 2534:7	<b>begins</b> 2533:8	2649:4,6,12	2604:19	2462:20
2573:25 2574:1	2607:20	2655:21	2606:10,22,25	<b>board</b> 2477:5
2579:10,11	<b>behalf</b> 2568:23	2663:10	2628:11 2649:2	2487:22 2488:1
2586:1 2587:4	2597:15 2607:6	2665:23 2673:3	2649:14,19	2488:2,3,10
	l	l	l	l

		 I		1
2533:7 2627:22	<b>bringing</b> 2473:22	business's	2498:18 2499:6	2684:19
2646:23	2573:16 2574:5	2561:22	2499:7 2525:21	<b>Capitol</b> 2461:17
2673:17	<b>broad</b> 2514:10	<b>buy</b> 2583:21	2526:10 2527:4	car 2590:12,24
<b>boards</b> 2497:23	broader 2507:4	2627:6	2527:17,23	<b>carbon</b> 2557:13
<b>bodies</b> 2521:13	Broadway	<b>buyer</b> 2630:20	2528:14	2557:17
Bolivar 2462:4	2461:13	2641:1	2544:25 2559:7	card 2542:12
bolster 2574:4	<b>brought</b> 2531:17	<b>buyers</b> 2630:19	2559:21 2560:6	2555:9
<b>book</b> 2533:17,24	Brubaker 2643:8	<b>buying</b> 2580:15	2562:7 2564:12	<b>careful</b> 2467:10
<b>bottom</b> 2582:19	2643:12		2564:24 2565:4	2530:23
2635:24	2654:10	$\frac{\mathbf{C}}{\mathbf{C}^{2}+\mathbf{C}^{2}+\mathbf{C}^{2}-\mathbf{C}^{2}}$	2565:21 2566:2	2659:25
<b>Box</b> 2461:8,18	2659:15 2661:7	C 2461:20 2463:2	2566:8,19	CAROLE
2462:10,15	2668:10	2503:6 2637:3	2567:9,19,24	2461:12
<b>Boyle</b> 2552:20	2678:10	calculate	2568:5 2570:7	case 2463:5
2553:4 2618:21	2680:22	2605:24	2653:17	2468:1,24
<b>Boyles</b> 2471:18	2690:23	2653:21	<b>called</b> 2483:16	2471:1 2474:2
2472:13	2693:19	2654:14	2484:5 2485:6	2474:9 2480:4
2479:11,21,22	2694:10,11,12	2655:10,20	2509:6 2557:13	2485:6 2490:7
2482:4 2524:22	2694:15	2663:20,21	2564:4	2490:19 2491:9
2525:2,5,7,9	Brubaker's	2679:17	calls 2526:22	2492:24
2532:24	2643:20	calculated	2544:5,12,18	2498:14
2542:23	2644:14,23	2495:4,5,16	2545:15 2546:7	2501:17
2560:13 2621:5	<b>Bryan</b> 2461:13	2509:4 2605:4	2546:10,13	2502:15
2692:6 2694:16	2462:3 2577:19	2605:22	2547:21 2674:1	2507:13 2508:9
2694:17 2695:2	2577:22	2647:19	camera 2463:18	2509:3 2516:10
2695:3,4,5	2586:15	2655:19	2467:7 2475:18	2517:6 2519:23
<b>brand</b> 2485:3	<b>Brydon</b> 2461:17	2656:17	2475:20 2476:3	2544:15,15,17
<b>Brands</b> 2482:20	<b>bubble</b> 2567:5	2670:14	2543:14	2548:14 2554:5
2482:22	<b>build</b> 2471:8	2679:10	2553:13 2556:2	2554:16,18,24
breached	2598:18,21	calculating	2570:3 2599:21	2571:2 2573:25
2468:12	2686:12	2509:17 2680:8	2600:15,19	2575:2 2576:15
break 2476:3,8	<b>building</b> 2462:24	2687:14	2601:8,10	2577:23,24
2549:3 2593:5	2530:9 2531:6	calculation	2631:25	2578:17
2608:11 2627:9	built 2502:20	2512:11 2513:8	<b>cap</b> 2612:8	2581:20
2639:12,21	2582:11	2648:18,21	2617:2	2588:17,20
2643:7,11	<b>bullet</b> 2541:13	2655:14 2664:7	capability	2594:11
brent.roam@b	<b>bunch</b> 2496:13	2664:12 2666:8	2491:11	2596:16 2600:8
2461:15	2532:12 2645:4	2666:12,18	2628:15	2601:4 2602:15
<b>bridge</b> 2563:9	<b>burning</b> 2598:14	2674:11	capacity 2478:25	2603:1,12,12
brief 2576:15	Busch 2580:12	calculations	2479:24	2608:6,20
2606:21 2645:2	2580:14	2649:6 2650:25	2587:24	2609:10 2611:1
2671:8	<b>business</b> 2561:18	2658:22,25	2679:16	2611:5,14
briefs 2554:21	2561:21	2668:22	capital 2510:16	2613:24
bring 2473:16,23	2583:19	2679:23	2539:9,15	2614:13
2575:20 2579:4	2596:13	2690:10	2557:3,4	2615:15 2616:1
2579:9,25	2612:14	calendar 2555:10	2561:22	2620:13,16
2591:24 2592:7	2640:16	call 2493:25	2612:20	2627:8 2635:7
2644:3 2680:14	2641:12	2496:12	2619:10	2636:14 2637:3
2011.2 2000.11	20.1.12			2020.11.2027.3

2637:20 2638:7	CCR-MO	2580:5	2523:4 2580:21	City 2460:6
2639:10,16,18	2460:23	chairman	<b>changes</b> 2480:15	2461:18 2462:4
2639:20,23	center 2570:24	2460:16	2480:18	2462:8,11,16
2640:2 2642:1	central 2541:13	2463:23	2510:24 2521:8	2462:25
2646:8,8,11	cents 2471:9	2542:20,22	2561:10 2589:2	2578:18 2696:6
2647:5,12,25	<b>Century</b> 2609:2	2543:8,12	characterization	<b>claiming</b> 2626:10
2649:8,15	2609:5 2628:13	2544:2 2546:24	2544:20	<b>clarify</b> 2671:25
2650:5,13	<b>CEO</b> 2468:13	2549:8,11,17	2672:25	clarifying 2650:7
2652:3,11	2533:1 2618:7	2549:20,23	characterize	clarity 2529:7
2665:5,8,11	<b>certain</b> 2473:12	2550:2,9,13,16	2607:25 2670:8	class 2551:8,13
2673:1,2,3,13	2480:3 2499:4	2550:23 2551:1	characterized	2552:8 2581:7
2673:17 2675:2	2550:18 2560:1	2551:6,16,24	2634:7	2648:12
2675:15	2560:5,20	2552:4,11,16	<b>charge</b> 2584:7	2661:11,12
2677:11,13	2561:12,13	2553:6 2572:16	2627:23	2668:21,22
2678:19,19	2562:17 2588:3	2574:11,16,21	<b>charges</b> 2631:18	2669:25 2670:4
2681:8,9,15,18	2610:11,22	2574:23,25	2647:2 2663:18	<b>classes</b> 2644:2
2687:15	2612:7 2617:12	2575:1,4	<b>chart</b> 2464:2	2669:24
2689:17	2657:24	2577:7,14	2467:2 2538:1	2678:17
cases 2468:21	2679:12	2578:4,7	2694:13,15	classified
2516:11	2681:21	2579:1 2580:24	<b>check</b> 2673:8	2463:12
2577:25	certainly 2470:6	2581:1,4,23	<b>chief</b> 2479:25	2668:21
2605:14	2473:1 2490:3	2582:2 2583:10	2486:6 2497:24	<b>clause</b> 2664:14
2609:14,19	2500:17 2531:1	2590:1,2	China 2522:25	<b>clear</b> 2477:4
2629:19 2630:1	2532:20 2577:6	2595:13,14	<b>choice</b> 2627:4	2478:25 2492:4
2656:6 2665:6	2579:18	2622:20,21,24	<b>chose</b> 2493:5,6	2508:5 2530:18
2681:16 2682:1	2592:20	2659:12,14	2494:20 2506:9	2537:8 2626:6
cash 2513:14	2600:13	2667:12	2512:6 2513:13	2650:19
2539:16	2627:22 2635:8	challenge	2513:21	<b>clearly</b> 2625:3,8
2555:16	2661:14	2475:16	2559:21	<b>clients</b> 2483:11
2565:11	2686:24	2667:14,19	2565:21 2576:8	2648:9,12
2568:18	2688:22	challenges	2641:4	<b>close</b> 2636:14,15
2620:21	2689:12	2475:14	<b>chosen</b> 2474:7	2637:3,21
2621:14 2622:7	certainty	CHAMBERL	Chouteau 2461:4	2638:7 2686:1
2628:8 2641:20	2465:14	2462:23	<b>chunk</b> 2485:9	<b>closed</b> 2602:3
cast 2467:5	2515:21	<b>chance</b> 2579:11	circuit 2521:3	2672:23
category 2580:8	CERTIFICATE	2629:13	circumstance	<b>closely</b> 2490:9
2627:2	2696:1	<b>change</b> 2480:24	2471:21 2472:5	2499:21,23
caught 2591:16	Certification	2509:13	2474:24	2500:7,13,14
cause 2480:1	2486:6	2511:11 2524:1	2688:19	2500:15
2560:2 2588:2	Certified 2696:3	2524:12 2563:7	2689:11	closing 2649:2
2689:6	<b>certify</b> 2696:4,12	2563:14,16,24	circumstances	<b>closure</b> 2539:5,6
Cave 2461:13	<b>CFO</b> 2482:10	2586:24 2594:4	2592:19 2666:5	2546:14
2462:3 2577:19	2485:12	2604:24 2605:1	2666:6 2676:16	2547:18,24
2577:22	2499:18	2661:12	2688:2	2548:2,3,9
2586:15	2618:21	2663:13	citations 2506:8	2613:14
caveat 2634:24	chair 2573:4	2677:12	cite 2554:21	coal 2598:14,16
CCR 2696:22	2578:6,10	changed 2502:1	<b>cited</b> 2679:10	2598:18
	I	I	I	I

2612:25	2526:3 2533:1	2579:2 2583:14	2479:4 2482:16	2573:19 2574:3
coat 2649:25	commission	2585:3,5,6,24	2483:15 2484:4	compliments
code 2636:13	2460:2 2466:7	2590:6 2591:4	2485:6 2486:25	2562:25
2637:2,19	2469:1 2480:2	2595:16,18,21	2487:24 2488:6	component
2638:6	2486:1 2487:7	2623:2,5,7	2488:7 2491:6	2546:1 2567:13
coexistent	2500:25 2507:4	2630:24 2631:3	2491:10,12	components
2551:21	2508:12	2635:16 2640:9	2516:9 2541:15	2522:1
COFFMAN	2510:21 2512:4	2661:2,6	2548:12	composed
2462:19	2512:10 2513:3	2667:4 2672:2	2560:18	2627:22 2670:1
cognitive	2514:7 2539:19	2675:13,23	2561:12,21	computation
2545:19	2545:8,12	2676:7	2565:6 2577:4	2513:25
<b>Colin</b> 2489:8	2551:15	commissioners	2580:11 2584:6	computations
2587:19 2693:1	2564:10 2573:8	2460:18	2596:12 2603:2	2661:18
colleague 2663:7	2573:21	2472:17	2613:14	<b>compute</b> 2513:24
2679:1	2575:16 2578:3	2573:10,12	2640:21	computed 2496:9
collective 2622:2	2578:19 2588:3	2574:8 2579:19	2641:20,25	2509:10
<b>Collins</b> 2484:5	2597:16 2607:7	2643:25	2675:21	2513:22
2484:16	2608:11	2686:10	company's	computer-aided
<b>Columbia</b> 2461:9	2609:22 2610:5	commissions	2560:2 2576:9	2696:8
<b>column</b> 2631:11	2610:9,19	2607:24	comparable	<b>concept</b> 2636:2,9
2671:12,17,19	2611:24 2612:3	2624:14,21	2624:2	concern 2471:22
2671:21 2672:8	2612:5,9,18,24	2625:2 2682:16	compared	2472:4 2475:12
2672:20	2613:22	Commission's	2541:23 2558:9	2530:17
2687:21	2614:18,19	2611:14	2561:14	concerned
<b>columns</b> 2649:7	2625:4,7,13,24	<b>commit</b> 2471:8	2624:11	2472:15
combination	2626:4,7,9,10	commitment	2627:25	2686:17
2663:15	2626:17,20	2469:4 2610:11	2688:21	conclude
combined	2627:2,4,8	2616:18 2617:6	comparison	2607:21
2661:24	2636:16 2637:4	2619:10	2544:3 2597:21	concluded
come 2463:4,9,13	2637:6 2638:9	commitments	2599:16 2601:2	2570:3 2606:24
2476:3 2505:15	2640:25	2474:11	2683:3 2686:3	2640:25
2528:25 2545:8	2647:25	2612:19 2616:1	2695:9	2641:25
2549:5,7	2649:11	2616:2,5,16	competency	2687:19 2691:6
2551:14	2667:17	2618:9,14,20	2649:23	conclusion
2574:20 2577:5	2668:12	2618:24	competent	2608:3
2641:8 2659:10	2677:10,12	committed	2574:1	conclusions
2676:3 2679:24	2681:7 2682:12	2468:23	competition	2546:4
comes 2478:16	2682:15	<b>common</b> 2487:13	2561:17	condition
<b>comfort</b> 2668:1	2683:15,20	communicate	complaint	2502:20
<b>coming</b> 2519:22	2687:10 2696:5	2488:25 2489:2	2620:13	2684:14,16,19
2679:3	commissioner	2489:5	complete	2684:22,25
commence	2477:25 2478:9	communicated	2465:15,19	conditioning
2463:8	2543:7 2546:17	2474:10	2466:8,18	2475:24
<b>comment</b> 2534:7	2546:18,20	communication	2480:20	conditions
2575:24 2590:9	2548:19 2553:6	2474:17	completed	2496:24 2499:5
2590:16 2629:7	2572:15,18	company	2552:19	2499:14
comments	2576:21,24	2460:10 2461:3	completely	2517:13
	1	l	l	l

2521:22,23	2545:13 2546:4	CONSUMER'S	contracting	corporate 2488:6
2522:3,10,19	conservation	2462:19	2473:20 2657:5	2577:10,15,25
2561:10 2605:1	2666:2	consumption	contractors	2578:8,10
2615:17	<b>consider</b> 2488:19	2533:14	2473:16,23	2580:6 2612:10
2640:13 2641:6	2508:1 2524:8	2534:13	contracts	2617:24
2684:12,15	2559:24	contained 2464:9	2621:21,22	corporation
2685:6,10,14	2573:21,24	2476:19	2625:16,24	2573:5 2577:13
2685:16,20,24	2637:5,6	2518:12	2626:1 2667:18	2577:18
conference	2647:23	2538:12 2540:3	contractual	corporations
2525:21	2649:22 2681:3	2543:20	2561:20 2609:5	2577:13
2526:22	consideration	2548:23	contradict	Corporation's
2527:23	2474:1 2507:12	2553:20 2556:5	2520:4	2485:24
2528:14 2562:7	2511:11 2637:8	2558:19	contributing	<b>correct</b> 2464:3,4
2566:19	2673:12 2679:2	2569:25	2658:2	2471:17 2474:5
confidence	considerations	2601:13 2632:4	<b>control</b> 2475:11	2477:16,18
2606:18 2607:1	2667:21	2653:19	2682:13	2480:25
2607:4 2655:13	considered	<b>contains</b> 2661:18	convened	2482:11,12,17
confident 2655:9	2602:16 2642:7	contemplated	2578:17	2482:18 2483:1
confidential	2679:19,21	2577:10,14,18	conversation	2483:4,5,7,21
2518:3 2528:25	2680:1,5	contested 2574:2	2614:3	2483:24 2484:5
2528:25 2529:5	2681:4 2688:19	<b>context</b> 2490:4	conversations	2484:6,19,25
2531:2 2539:24	considering	2537:11	2474:15	2485:14,15
2541:7 2548:13	2559:17,22	2547:17	2500:17,18	2486:3,7,10,13
2569:15	consistency	2646:10 2663:6	2507:8 2659:23	2486:14,22,23
2599:18,20,24	2547:4	contingency	<b>convert</b> 2619:13	2487:24
2600:4 2602:14	consistent	2490:22 2491:1	converted	2488:20 2489:7
confidentiality	2607:23 2608:4	continued	2509:12	2490:7,8,12,20
2660:1	2649:8	2636:17	conveyed 2465:7	2491:16,21
<b>confirm</b> 2534:22	constant 2624:6	continuing	2567:8	2492:14 2493:2
2626:16	construction	2487:7 2605:21	<b>cooler</b> 2476:11	2493:23,24
2668:16,21	2465:15	2637:11	<b>Cooper</b> 2627:19	2494:4,5,18
confirmed	2470:24 2530:9	continuous	2627:21	2496:10,18,21
2625:14 2626:3	2531:7	2677:10	cooperation	2497:13,14
confused	<b>consult</b> 2614:1	contract 2608:12	2473:18	2498:1,24,25
2551:24	consultant	2608:17 2609:4	cooperative	2499:2,3,12,24
2563:12	2587:25 2588:1	2615:12	2627:20	2500:5 2501:2
Congratulations	2596:14	2619:11 2625:9	<b>copies</b> 2594:11	2501:3,8,9,14
2594:8	consulting	2626:7,14,25	<b>copper</b> 2521:17	2502:13,21
conjunction	2596:13	2627:9 2634:25	<b>copy</b> 2466:18	2503:2,3,17,21
2625:9	consumer 2532:5	2635:3 2639:11	2523:15	2503:24,25
connection	2551:10	2639:21,23	2534:22,25	2504:6,11,12
2561:25 2562:4	2582:17	2640:20 2642:3	2596:16	2504:15
conscientious	consumers	2642:7 2643:1	2611:13	2506:11,12
2613:19	2549:21	2657:4 2661:16	2635:18	2507:5 2508:9
consensus 2503:5	2581:15 2636:1	2667:14,24	copyright	2508:12,13
2503:7 2519:24	2636:18 2637:7	contracted	2523:22	2509:1,2,14,18
consequences	2638:15	2473:19,19	<b>core</b> 2560:10	2509:22
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

2510:10,11,14	2587:23	2673:13,19	2666:4,9,9,20	2674:5
2510:15,18,22	2597:17,23,24	2674:2,6,22	2672:3,5	<b>country</b> 2639:7
2511:9,21	2598:5,6	2675:2,16,17	2678:14,23	2688:22
2512:1,8,12,13	2600:22	2676:23	2681:14 2688:2	<b>couple</b> 2524:1
2512:17,21	2604:10,13	2678:20	2688:4,7,8,9,12	2581:2 2598:8
2513:5,7,15,20	2605:2 2607:13	2679:14 2686:4	2688:21	2599:2 2631:24
2514:3,9,21	2607:14,16,17	corrected	2689:16	2646:6 2659:6
2515:2,3,5,7,9	2608:8,14	2550:18 2677:3	costs 2510:13	2685:5
2515:12,17,23	2609:24 2610:3	correcting	2561:24	course 2498:15
2516:2,6,7	2610:4,7,12,17	2688:6	2598:18	2525:19
2517:4,17,22	2610:23 2612:2	correction	2619:21,25	court 2462:7
2519:6,12,22	2612:7,15,20	2478:10	2620:2,5,19	2481:22
2520:7,17	2612:21 2613:2	corrections	2621:12 2622:6	2524:17 2535:1
2521:10,15,16	2613:3 2614:16	2526:9 2550:21	2622:13 2624:1	2554:3,10
2521:19,24	2614:22 2615:1	2571:18	2629:6,12	2592:18
2522:11	2615:7,8,11,13	correctly 2487:4	2631:13,17	2626:14 2660:9
2523:13,21	2616:15	2487:18	2653:4 2654:23	2667:14,19
2524:2,14	2617:21,22	2533:21	2654:24	courtroom
2525:13 2526:2	2618:7 2619:7	2535:19 2537:9	2660:15 2663:5	2568:20
2526:10,11,25	2619:23 2620:3	2537:10	2663:6,7	cover 2485:23
2527:1,5,6,19	2620:10,17	2607:25 2636:6	2664:2 2674:2	2584:2,3
2527:20	2621:2,10,24	2668:15 2682:6	2676:2 2677:17	coverage 2584:8
2528:14 2529:1	2622:3,4,14	correlated	2677:17,19,24	covered 2554:5
2529:6,15,23	2623:16,23	2511:5	2678:3 2681:7	<b>co-op</b> 2627:7
2530:2,3,10	2624:11,12	<b>COS</b> 2662:21	2681:11,25	co-op's 2610:21
2531:24	2625:20 2644:6	2665:10 2671:9	2682:7,8	cramps 2592:4
2532:18,19	2644:8 2646:14	cost 2471:14	2683:6 2686:12	create 2660:10
2533:2,25	2647:21 2648:1	2474:22 2551:8	2686:12 2687:7	<b>created</b> 2469:16
2534:5 2535:2	2648:10,19,20	2551:13 2552:8	2688:15,24,25	2638:10
2536:5,9	2648:23 2649:3	2558:5 2561:13	2689:8 2695:9	creating 2562:25
2537:5 2539:7	2649:16 2650:5	2563:7 2567:11	COUNCIL	<b>creation</b> 2661:11
2539:11,17	2650:17 2651:8	2568:1 2580:18	2462:19	<b>creative</b> 2603:11
2541:22,25	2651:11,17,22	2581:8 2584:3	counsel 2462:9	credible 2523:24
2542:5,6,10,14	2652:4,16,23	2597:22 2598:3	2462:10	2524:5,7,8,14
2543:3 2549:15	2654:2,25	2601:2 2604:19	2481:11	<b>credit</b> 2472:9
2549:22	2658:17	2619:25	2530:11 2531:1	2542:11 2555:9
2550:19	2661:18,22,23	2620:14,20	2535:16 2541:5	critical 2553:9
2557:25	2662:2,11	2621:1,8,13	2549:9 2572:4	criticisms
2562:20	2664:22	2623:14,18,22	2582:18	2506:21
2564:11,18,19	2668:18,19,23	2624:10 2628:7	2589:13 2595:1	2507:21
2565:17 2566:5	2668:24 2669:1	2629:5,20,21	2597:6 2599:11	2509:24
2567:17	2669:2,4,11,19	2631:11,15	2602:3 2639:4	cross 2477:24
2568:23 2569:2	2669:22,23	2636:3 2654:20	2643:24	2482:2 2553:2
2569:5,6	2670:9,10,16	2654:22	2645:24 2659:2	2571:23 2572:3
2570:14 2575:3	2671:14,22	2656:18	2668:7 2696:13	2572:5 2579:7
2584:12,21	2672:4,11,12	2662:25 2663:5	2696:16	2579:10 2586:1
2586:13	2672:15,23	2665:21,23	<b>count</b> 2474:11	2586:4,8
		1	1	1

2589:12	2578:10	cycle 2491:16,21	2474:7 2480:17	2568:22
2591:19	2642:11	2492:3,8,14	2480:19,21	2615:15
2592:10,14,15	2647:20	2493:1,6,11,11	2500:3,7	2616:11,23
2592:20	2651:13,14	2493:14,16,17	2502:3 2507:25	2647:12
2594:21,25	2652:19,22	2493:20,25	2652:11	decide 2573:25
2597:1,5,10	2656:8 2660:12	2494:2,6,25	dated 2580:20	decided 2569:8
2603:16 2604:1	2665:1 2666:22	2496:11,12,20	Dauphinais	decision 2472:19
2605:19	2666:24	2496:23	2649:5 2663:8	2474:25 2493:8
2645:17,20,25	2671:23,24	2497:12,16,20	2679:1,9	2569:7 2612:3
2646:4 2653:11	2678:14,14	2497:22 2498:1	2680:23 2681:2	2613:19 2614:1
2656:14	2683:7	2498:4,5,17	2689:21	2614:5,8
2675:10 2678:8	currently	2499:16 2504:6	<b>David</b> 2462:6	decisions
2684:4 2692:8	2630:12	2506:11	2671:15	2487:17 2488:3
2692:12,23	2666:20	2641:18	david.woodsm	2545:2
2693:10,11,20	<b>curtail</b> 2474:20	cycles 2499:4	2462:9	deck 2527:3,22
2693:21,22	2548:8	2504:25 2505:2	day 2463:5	<b>decline</b> 2532:22
CRU 2488:12,25	<b>curves</b> 2498:19	2505:5,19	2486:19	declining
2489:11 2490:9	<b>cusp</b> 2590:18	2506:5,6	2501:25	2640:19
2490:10	customer 2471:2	cyclical 2560:24	2510:19	decrease 2563:16
2491:24	2471:6,7	C-R-U 2587:22	2522:23	2662:16
2492:23 2496:6	2585:21		2555:19 2585:1	2681:10
2499:21,23	2606:22,25	D	2604:17 2655:5	decreased
2500:7,13,15	2608:13	<b>D</b> 2462:23 2463:2	2655:18	2610:17
2502:12 2509:9	2619:14,15	<b>daily</b> 2490:15	days 2585:1	2651:24
2512:24	2627:4 2637:23	<b>Dale</b> 2479:21	2659:6	2662:12
2513:21 2514:9	2658:10	2692:6	day-to-day	decreases 2674:7
2514:11,13	2660:16 2670:1	DANIEL	2555:22	decs 2546:10
2515:22	2689:2,3,4	2460:17	<b>DB1</b> 2517:24	2603:5
2519:18	customers	2461:20	<b>de</b> 2670:7,8	<b>deep</b> 2472:4
2522:11,12,14	2522:12	dash 2601:3	<b>dead</b> 2530:4	<b>deeply</b> 2472:15
2523:12,20	2532:17	2636:13,14	<b>deal</b> 2475:14	2582:23
2524:4,9	2561:19	2637:2,3,20,20	2581:14	<b>defer</b> 2614:9
2529:24 2530:4	2613:11	2638:7,7	2644:16 2686:6	2645:17
2531:10	2636:20	2648:3,15	2686:23	deficit 2523:3
2587:21,22,25	2637:12	2662:21,21	<b>dealing</b> 2551:12	<b>define</b> 2497:19
2602:10,12	2638:11,16	2671:17	2647:2	2497:21
2603:3,4,6,7	2648:22 2649:1	2672:20	dealt 2609:15	<b>defined</b> 2492:14
CRU's 2501:18	2649:13 2650:2	data 2488:17,22	debatable	2497:25
2502:19	2650:3,22	2488:25	2622:10	definitely
2512:20 2513:5	2652:13,14	2495:18	debt 2472:11	2545:13,18
2513:9 2514:3	2657:10	2506:13 2601:5	2477:22	2676:11
2515:1,11,13	2664:15,16,18	2620:11 2621:6	dec 2560:12	definition
2517:9 2520:2	2664:20 2665:1	2637:24	2562:17,22	2496:23
2523:4 2529:25	2665:15	2655:12 2666:14	2564:13,17	definitive
CSR-IL 2460:23	2672:22 2678:5	2687:14	2566:22	2545:11 2547:5
2696:22	2683:10 2689:6	date 2471:24	December	degree 2524:11
<b>current</b> 2532:17	cut 2639:17	uaic 24/1.24	2485:20 2486:1	<b>delay</b> 2473:23,25
	ı	ı	ı	ı

<b>delayed</b> 2465:12	describes	2501:22 2547:1	2515:13 2570:9	2544:10
delivered	2636:13 2637:2	2547:10,11	2571:1,1	2672:24
2631:16,17	2637:19 2638:6	2628:7 2662:3	2579:13,14	disallowance
demand 2520:13	describing	2664:4 2671:23	2588:4,16,24	2660:18
2520:14,15	2512:10	2673:8 2674:21	2590:9 2592:18	2676:17
2521:5,7,14,18	description	2675:25 2688:8	2593:20 2596:5	disappointed
2521:21	2624:25	differences	2607:19	2470:7
2529:18,22	design 2551:9,13	2662:13	2608:24	disclose 2544:24
2530:10 2531:7	2552:8 2581:9	different 2484:19	2609:14	2546:2
2531:16,22	2641:16	2498:18	2610:25	disclosed
2532:13,16,22	2661:13	2501:21 2503:7	2614:12	2465:21
2533:18,25	designed 2624:16	2507:13,14	2615:15	2555:17 2575:5
2537:15,18	<b>details</b> 2663:9	2509:4 2510:13	2616:10	2600:1
<b>demands</b> 2670:3	determination	2519:21	2618:16	disclosure
demonstrate	2474:9 2635:25	2522:22 2523:9	2619:19	2548:15
2491:3	2638:12	2544:13,18	2624:13	disclosures
demonstrating	2655:11 2656:7	2547:5 2548:11	2627:11 2629:9	2465:9 2547:23
2637:24	determine	2558:12 2594:5	2631:5,6	2562:15
<b>demoted</b> 2604:7	2491:20 2492:8	2645:5 2666:10	2643:20	<b>discount</b> 2614:25
<b>denied</b> 2582:9	2492:13 2498:3	2673:3,6	2644:14	2615:3 2628:1
departure	2499:21 2516:8	differential	2647:15 2651:6	2640:19,21,22
2686:16	2606:24	2651:19,21	2662:8 2663:1	2640:23
<b>depend</b> 2584:25	2627:23 2638:9	2652:12,19,22	2665:20	discounts 2606:8
2653:3	2687:6	2652:25	2670:13	discrepancy
dependent	determined	2674:25	2687:24 2692:7	2547:8,9
2548:7	2509:21	differentiation	2692:17 2693:2	discuss 2616:3,4
<b>depends</b> 2501:25	2606:10	2624:5 2636:4	2693:6,9	2663:2
2606:6 2623:13	2617:14 2641:2	differentiator	2694:10,16,18	discussed
2665:3 2676:16	determining	2623:24	2694:20,22,24	2516:18
<b>Depo</b> 2695:2,3,4	2664:17	differently	direction	2546:11
2695:5	<b>develop</b> 2492:3	2521:2 2689:13	2519:15	2547:21 2612:4
deposition	developed	difficult 2499:15	directions	2627:15
2504:17,18	2498:11	2515:20	2468:25	2652:20 2676:7
2520:23	developing	2516:20	directly 2521:9	2680:13
2524:22 2525:5	2552:7 2582:6	2606:15	2634:12	discussing
2525:7,15	development	difficulties	2642:15	2520:22
2534:16,22	2551:8 2580:8	2473:5,6	<b>director</b> 2570:23	discussion
2535:5 2592:17	2581:7 2585:9	2562:4	2594:3	2465:17
2592:22 2593:3	2585:17	direct 2474:17	directors 2477:5	2478:20 2485:5
2620:15,24	deviation	2479:18 2480:3	2477:11	2539:6 2546:13
2621:9 2622:11	2506:18	2480:7 2489:13	2487:22 2488:4	2566:13 2592:2
describe 2511:14	2662:24 2672:3	2498:22 2500:1	2488:11	2599:12 2616:9
2609:14	deviations	2500:4,16	2577:20	2686:9 2687:1
2614:13	2506:10	2502:6 2503:14	disagree 2489:16	discussions
2624:13 2629:3	<b>DIANA</b> 2461:11	2503:17,21	2489:22	2500:8 2503:12
described	differ 2560:3	2507:9,17,22	2531:13	2503:13 2520:5
2636:10	difference	2511:15 2514:8	2534:12	2642:10
	<u> </u>	1	1	l

			1	
2660:23	2571:8,11	draw 2496:19	economics	2598:13 2601:2
dismantled	2578:8 2580:7	<b>driver</b> 2533:18	2570:19	2610:3 2616:13
2630:22	2586:11	<b>driving</b> 2521:18	economist	2619:20 2620:1
disposed 2579:2	2644:16	2533:17,24	2492:17,20	2620:6 2623:19
dispositions	<b>doing</b> 2579:9	2590:12,24	2497:24	2623:21,23
2562:5	2580:22 2650:1	2657:21	economy	2629:21,22
<b>dispute</b> 2503:10	2657:8,14	<b>drop</b> 2469:5	2537:13	2631:11,15
disregarded	<b>dollar</b> 2652:10	due 2576:10	EC-2014-0024	2664:7
2499:1	2667:24	durables 2532:5	2554:5	Electricity2687
disruptions	2677:19	DUSTIN	<b>edge</b> 2649:17	2695:9
2555:16	2679:22	2462:10	<b>edited</b> 2525:20	elements 2688:10
2561:23	dollars 2471:9	<b>duty</b> 2467:25	EDWARD	eliminated
dissidence	2598:20	2468:5,9,13	2462:3	2499:3 2674:25
2545:20	2615:10	<b>d/b/a</b> 2460:10	efdowney@br	elimination
distinction	2662:15 2680:7	2461:11	2462:5	2648:8 2661:25
2599:19	2680:8 2683:9		effect 2620:7	2662:9
distribution	domain 2626:5	<u>E</u>	effective 2652:11	Elmo 2481:24
2513:9 2627:7	domestic	E 2463:2,2	<b>effects</b> 2561:17	embedded
<b>District</b> 2670:9	2597:22 2601:2	2637:20	2687:16	2514:4 2654:21
diversity 2628:21	doubt 2546:25	<b>earlier</b> 2474:22	efficiency 2666:3	2654:24
dividend 2478:7	<b>Downey</b> 2462:3	2478:15 2548:5	efficiently	2662:25
2478:7,12	2537:25 2538:2	2555:17	2584:24	2666:20 2672:3
dividends	2596:3 2643:18	2557:12	<b>effort</b> 2626:19	2672:5 2688:4
2477:13,14,20	2644:7,11	2568:21 2569:1	<b>efforts</b> 2624:14	2688:8,9,21,24
2554:4,9	2645:9,11,12	2603:12 2616:1	2626:18	employed
2684:23	2645:22	2618:6 2627:15	<b>eight</b> 2469:6	2478:25 2479:4
dnelson@arms	2671:15,18	2643:13 2674:1	2499:1 2532:9	2479:22
2461:23	2680:20 2684:9	2674:16,20	2629:11	2570:16
<b>doable</b> 2606:3	2690:12,18	2685:3	either 2489:23	2587:20
document 2486:5	2694:5	early 2473:10	2514:7 2521:9	2593:25
2486:17	downturn 2561:9	earned 2541:19	2543:9 2564:24	2596:10,11,14
2524:21 2525:1	2561:11	<b>earning</b> 2544:12	2573:13	2696:13,16
2527:24 2530:5	downturns	earnings 2527:4	2624:15,22	employee
2534:24	2628:16	2544:4,18,25	2656:21	2696:16
2535:10	downward	2545:15 2546:7	2686:10	employees
2537:23	2501:8,13	2546:9 2547:21	elaborate	2472:22
2551:20,22	<b>Dr</b> 2495:12	2559:7 2564:12	2590:10	2473:24
2552:10 2581:5	2503:20,23	East 2461:17	electric 2460:9	2621:19 2622:1
2581:12,19	2505:17	2462:23,23	2460:11 2461:3	2684:17
2582:6,8,13,19	2570:14,16,25	easy 2661:10	2461:11 2599:4	employment
2582:24 2583:2	2571:22	EBITDA	2608:19	2610:12,15
2586:14	2592:17 2604:3	2567:16	2610:20	2617:7 2618:14
2599:17	2604:4	economic 2551:8	2619:14	2619:10
2653:23	drafted 2550:1	2561:9 2570:23	2627:19 2637:7	encountered
documents	drafting 2585:16	2581:7 2585:9	electrical 2532:1	2473:5,6
2485:13	dramatically	2585:16	electricity 2567:5	2562:4
2525:13 2554:7	2641:19	2590:11	2597:22 2598:3	<b>ends</b> 2487:15
	l	l	l	<u> </u>

	I	l	I	l
<b>energy</b> 2462:1	2652:8,16	2584:11	2692:4,7,8,12	2469:21 2480:6
2561:14 2568:1	2653:1	Ex 2695:2,3,4,5	2692:13,14,23	2499:8 2524:18
2580:9,10	especially	exact 2507:25	2693:2,10,11	2524:21,22
2583:25	2474:23	2547:12,15	2693:14,15,16	2525:1,2,4,5,6
2613:11	essentially	<b>exactly</b> 2496:19	2693:20,21,22	2525:7,19
2635:25	2493:15 2629:4	2534:6 2552:3	2694:1,2,3,4,5	2526:13 2527:2
2636:18,20	2661:25	2665:7	Examination/Ms	2527:3,5,8,21
2637:11,23	establish 2493:1	exaggerated	2692:17 2693:6	2528:3,11,17
2653:4 2679:15	2496:24	2629:18	2693:9,17	2529:11,19
2681:3	2624:22	examination	examine 2579:7	2530:16
engineering	2625:19	2479:18 2482:2	<b>example</b> 2484:1	2532:24,25
2666:3	established	2542:21	2489:2 2494:14	2541:3,8
<b>England</b> 2461:17	2517:7 2600:18	2546:19 2553:2	2521:12	2554:6 2564:13
<b>ensure</b> 2626:13	2608:18	2555:6 2570:9	2539:14 2630:2	2565:17
<b>enter</b> 2667:18	2626:17	2571:23 2572:3	2656:17	2567:19 2571:8
<b>entered</b> 2468:17	2639:23	2581:3 2583:13	examples	2585:9 2588:14
2575:9	estimate 2513:5	2585:4 2586:8	2555:20	2600:24 2602:3
enterprise	2514:9 2519:22	2587:15 2590:5	exceeded	2602:4,6
2509:6,19	2606:13,19	2591:19	2610:22 2612:7	2611:8,12,18
2510:4,5,8	2656:8 2657:15	2592:10,14,15	2612:17	2627:10 2631:5
2537:22	estimated 2584:8	2592:20	<b>exceeds</b> 2617:12	2635:18
2539:18	<b>evaluate</b> 2499:18	2593:20	excerpts 2466:18	2643:25
<b>entire</b> 2466:19	2687:18	2594:21,25	excess 2610:20	2644:12,23
2485:21 2495:1	evaluated 2663:7	2596:5 2597:1	2638:9,13	2653:13
2606:25	evaluating	2597:5,10	2670:3	2658:23
<b>entirety</b> 2466:24	2573:8	2604:1 2605:19	Exchange 2466:7	2661:17
entitled 2566:24	evaluation	2623:6 2631:2	2486:1 2487:7	2668:13 2671:6
<b>entity</b> 2577:11	2683:11	2635:13 2639:2	2488:1	2671:10
environment	2687:22	2645:18 2646:4	exclude 2651:7	2675:12 2687:3
2475:8	event 2525:24	2653:11	2651:10	2690:9,13
equal 2646:22	2526:2 2612:13	2656:14	Excluding	exhibits 2481:3
2673:17	2656:24	2659:13 2661:5	2541:21	2495:2 2524:17
equipment	2696:11	2667:7 2668:8	excuse 2604:5	2525:9 2554:5
2557:13	events 2513:14	2671:4 2678:8	2618:6 2654:15	2554:23 2559:9
2610:15	2521:4 2526:6	2680:19 2684:4	executive	2588:6 2589:6
equity 2640:18	2560:1	2696:14	2598:17	2594:12,20
2666:2	eventual 2516:13	EXAMINATI	executives	2596:18,25
Ernst 2484:20	everybody	2675:10	2519:25	2643:19 2694:8
error 2512:16	2649:8 2687:19	Examination/	exempt 2651:15	exist 2466:10
ER-2010 2601:3	evidence 2526:14	2692:9,20	2678:2	2575:25
ER-2012-0166	2527:8 2528:17	2693:23	exempted 2677:8	existing 2542:4,9
2646:8	2554:8,18	Examination/	exemption	2542:13
ER-2014-0258	2574:1 2575:20	2692:10,11,21	2549:14 2551:2	2661:13
2460:10 2463:6	2650:17 2671:7	2692:22 2693:3	exercise 2641:5	<b>expand</b> 2678:11
escalated	Evidentiary	2693:12,13,24	exercised 2635:4	expanded
2681:17	2460:4	2693:25	exhibit 2465:5	2636:17
escalator 2652:3	evils 2504:14	Examination/Mr	2466:14	expect 2524:10
220111101 2002.0			2.00.11	

2593:10	extra 2575:18	<b>factor</b> 2487:9	2585:12	<b>fetch</b> 2663:15
expectation	extraordinary	2488:9 2502:23	2597:25 2598:9	fiduciary
2563:25	2521:4	2534:13 2548:5	2614:10	2467:25 2468:5
expectations	extruders	2664:24	2624:20	2468:9,12
2562:2	2483:11	2665:14	2626:23 2631:7	<b>fifth</b> 2561:3
expected 2474:8	eyes 2466:3	2689:10	2684:11	<b>figure</b> 2491:15
2501:1 2524:1	<b>e-mailed</b> 2581:20	factored 2502:12	fan 2463:25	2579:5 2591:21
2636:19	2586:14,15	2631:17	fans 2463:20	2678:13,16
expenditures		factoring	far 2463:23	2679:22
2510:16 2557:3	<b>F</b>	2631:13	2520:6 2631:11	<b>figures</b> 2510:20
2557:5 2684:20	<b>F</b> 2462:3 2638:7	<b>factors</b> 2510:12	2683:17	2659:4 2678:12
<b>expense</b> 2623:20	<b>FAC</b> 2648:8	2519:10,13,14	<b>farther</b> 2606:17	2679:9
expenses 2555:13	2651:7,7,11,13	2519:18	2658:14	file 2460:10
2555:15 2557:4	2651:20	2544:24	fatal 2552:15	2551:23
expensive	2660:17	2545:17 2546:2	favor 2688:2	2573:20
2557:20	2661:25 2662:9	2546:5 2562:14	favorable	2649:24 2652:5
experience	2662:16 2665:1	2565:25 2569:3	2521:22,25	<b>filed</b> 2480:2
2482:9,23	2665:14	2637:5,10	2522:2 2533:13	2500:3,16
2497:22 2604:9	2670:13,14,21	<b>faded</b> 2533:3	favorably 2487:3	2503:20,23,24
2604:15	2676:13,22,24	<b>failed</b> 2610:14	<b>Fayne</b> 2596:2,9	2507:21 2508:2
<b>expert</b> 2488:19	2677:17 2678:2	<b>failures</b> 2473:10	2596:10,15	2550:17
2513:11	2681:17	fair 2478:4	2597:12	2551:12
2517:12 2604:8	<b>face</b> 2469:6,7	2482:21,24	2600:23 2604:3	2552:14 2566:9
2683:24	2683:10	2484:16,17	2604:5 2608:22	2568:22
<b>experts</b> 2516:14	facilities 2629:2	2485:3,10	2609:11	2575:11 2576:1
2517:4	facility 2465:9	2487:8 2492:9	2611:11	2576:14
<b>explain</b> 2545:19	2472:9 2475:2	2492:18,19	2616:22	2577:21,22
2547:7,10	2475:9 2548:8	2498:5,15,16	2618:11	2582:8 2583:1
2602:9 2639:18	2548:10	2501:19 2502:9	2622:17,21	2586:11,16,18
2665:7,23	2555:19	2502:10 2503:8	2623:8 2635:15	2586:21 2588:3
2681:6 2683:2	fact 2470:5	2506:25	2639:4 2654:11	2601:3 2615:14
2687:10	2472:18	2508:22,23	2693:8 2694:18	2616:11,23
explained	2487:23	2509:7 2510:21	2694:19	2618:6,17
2640:10 2680:2	2488:22	2532:13 2539:5	<b>Fe</b> 2462:24	2631:5 2643:23
2690:9	2489:13 2490:5	2541:15	February	2646:11,16
explaining	2497:21	2544:19 2579:5	2523:14	2650:9 2662:14
2572:24	2501:16 2503:4	2684:7,8	<b>fee</b> 2602:11	2662:17 2674:1
explicitly 2617:8	2504:13	2686:22,24	feel 2463:25	2676:19
2618:9	2506:15 2522:9	fairly 2485:4	2531:2 2533:13	<b>filing</b> 2485:25
<b>explore</b> 2600:13	2530:20 2532:15 2530:0	2624:1 2638:14	2593:11	2554:14,15
explored 2598:25	2532:15 2539:9	fairness 2497:15	<b>feeling</b> 2593:13	filings 2603:4
expose 2475:15	2539:14 2546:25	faith 2468:18	feet 2475:10	final 2498:23
expressed 2560:4	2546:25	2469:2	<b>fell</b> 2641:19	2579:11
extend 2677:14	2586:20,24	falls 2627:1	<b>felt</b> 2468:20	2611:14
extent 2466:19	2626:1 2634:8	<b>familiar</b> 2485:7	2660:8	finally 2525:6
2612:16	2664:25 2678:1 2678:21	2489:8 2581:5 2582:2 2585:10	FERC 2635:6 Ferndale 2629:1	2528:10 2582:13 2638:5
exterior 2484:12				

<b>finance</b> 2470:23	five 2494:2,6,8	force 2475:15	2532:3 2559:17	2667:25
2471:20	2494:12,14	<b>forced</b> 2641:21	2559:23,25	<b>FSC</b> 2651:16
<b>financial</b> 2471:21	2496:20,21	Ford 2521:12	2560:4,14,15	2677:7
2479:25 2486:6	2497:6 2517:22	<b>forecast</b> 2501:18	2560:22 2561:8	fuel 2649:9,9
2583:19 2628:3	2603:1 2605:22	2502:13,17,19	2562:19	2651:24
2628:15	2605:25	2504:14 2508:8	2565:20	2660:14
financially	2673:19,24	2512:20 2513:5	2579:25 2592:7	2662:12
2696:17	2674:15	2513:9 2514:3	2657:1,23	2664:14
financing	<b>fix</b> 2475:23	2514:4,13,15	2679:15,16	2673:25 2674:2
2471:10,22,25	2503:19	2515:1,14,22	2681:3	2674:9 2681:7
<b>find</b> 2533:5	<b>fixed</b> 2584:3,7	2516:15,20	<b>found</b> 2562:21	2681:11,14,25
2535:9 2547:4	2686:12	2517:2,6,8,9,11	2566:4 2569:3	2682:7,10,10
2552:15	<b>flat</b> 2532:13	2519:18 2520:1	2588:24	<b>fulfill</b> 2561:21
2603:11	flexibility	2520:2 2522:21	foundation	<b>full</b> 2479:20
<b>finding</b> 2629:8	2641:17	2523:5,12,15	2471:7 2600:18	2541:17
<b>findings</b> 2638:1	flip 2535:5	2524:4 2531:11	<b>four</b> 2477:11	2587:17
<b>fine</b> 2538:7	flow 2513:14	2605:25	2484:22,23	2590:18
2543:8,9	2565:11	2656:17,20,22	2524:17,18	2593:22
2550:9 2576:25	2568:18	2657:15,25	2530:9 2531:8	2627:25 2628:2
2579:16	2664:13	2658:7,9,15	2532:2 2626:22	2629:4 2635:23
2592:12 2593:8	<b>flowing</b> 2660:15	forecaster	2627:13	2665:21
2681:2	<b>flu</b> 2591:16	2590:12	2641:15	2666:19
finished 2473:1	fluctuations	forecasting	2666:19,22	fully 2544:23
2690:18	2561:12 2637:8	2483:25	2667:1 2672:6	2598:15
fired 2598:19	focus 2469:4	2484:14	2672:11,17	2688:24
<b>firm</b> 2483:6	2503:12	forecasts	2677:1,1,2,3	<b>full-time</b> 2492:20
2484:19	2507:17	2488:17	2678:15	<b>function</b> 2675:20
2488:16	2520:25	2490:11,14,16	2687:13	<b>fund</b> 2555:13
<b>firms</b> 2522:13	2607:19	2508:6,12	<b>fourth</b> 2525:21	2612:25
<b>first</b> 2465:11	2623:18,21,23	2517:14,15	2542:12 2544:4	fundamental
2468:17,19	2675:3	2523:10,20	2559:8 2562:19	2523:5 2533:18
2469:7 2473:2	foil 2532:13	2529:24 2606:4	2563:5 2565:14	2656:22
2474:8,12	<b>folded</b> 2681:11	2679:16	2566:18 2568:5	fundamentally
2478:12,13	2681:15	foremost	2597:16,19	2576:8
2491:14,17	folks 2526:7,8	2468:17,19	2607:6	fundamentals
2496:21 2497:6	<b>follow</b> 2482:8	<b>forgot</b> 2550:1	frame 2507:18	2537:19
2506:10 2535:9	2503:11	forgotten	<b>frankly</b> 2475:13	<b>funny</b> 2590:14
2552:23 2555:8	2532:17	2685:11	2478:19 2550:1	<b>furnace</b> 2557:13
2558:11	2535:11	<b>form</b> 2471:7	2606:7	<b>furnaces</b> 2557:16
2559:11	2635:15 2639:7	<b>formed</b> 2577:19	free 2463:25	2557:18,19,21
2580:25 2598:8	following	<b>former</b> 2598:17	2531:2	2557:24
2615:2 2631:23	2535:15	formula 2508:25	Friday 2574:20	further 2499:2
2639:9 2647:18	2536:18	Forsyth 2461:21	front 2485:23	2530:21
2649:7 2660:6	2656:16	forth 2481:24	2525:9 2530:24	2542:17 2555:1
2675:13	2667:11	2638:1	2545:8 2551:14	2585:24 2591:4
firsthand 2630:3	<b>followup</b> 2593:2	<b>forward</b> 2463:9	2635:19	2592:17
2630:5	<b>foot</b> 2651:7	2478:18 2510:4	2653:13	2605:17
	l	I	l	l

2622:16	2684:13	<b>globally</b> 2519:14	2477:23 2478:3	2597:12,13
2630:24 2634:3	generate 2498:13	2521:23	2481:23,23	2604:3 2623:8
2635:11	2627:18 2628:8	2522:20	2485:19	2623:9 2659:15
2638:22 2643:4	2640:24	<b>go</b> 2468:8	2493:20,21,22	2659:16 2661:7
2653:7 2656:11	generated	2473:14	2494:3 2497:5	2661:8 2667:9
2659:8 2667:4	2498:18	2475:10,19	2497:5 2501:11	2667:10
2671:1 2675:7	generation	2476:15	2503:1 2506:16	2668:11 2687:6
2678:6 2680:16	2627:16	2478:18 2518:4	2513:4 2516:6	<b>goods</b> 2637:9
2696:12,15	generic 2631:4	2518:6,9	2516:21 2518:4	<b>gotten</b> 2683:4
<b>future</b> 2478:19	generous	2528:24	2521:13,14	governor
2490:20	2674:13	2532:25 2538:5	2524:16,20	2625:10
2506:17 2516:6	<b>getting</b> 2567:12	2538:9 2539:23	2525:1 2530:18	grant 2514:12
2516:16	2606:12	2541:2,6	2530:20	<b>granted</b> 2678:18
2541:15	2664:21	2543:11,14,16	2531:23	<b>graph</b> 2497:4,5,9
2559:25	<b>GI</b> 2592:4	2545:6 2548:20	2533:25 2534:8	2538:2,3
2566:14 2591:2	give 2465:24	2552:23	2534:21	graphs 2509:5
2606:14	2471:18	2553:17	2535:13 2538:4	2517:22
2651:11,12,18	2472:24	2555:25	2538:5,7	great 2607:3
2652:3 2656:25	2499:17	2558:16 2562:9	2539:23 2543:4	2628:1
2657:19	2505:23	2565:24 2566:9	2543:10	greater 2523:25
2677:13	2507:11,14	2569:11	2546:24	2524:10
2678:19,24	2560:9 2591:24	2580:24 2584:4	2553:15	2651:21 2664:3
2679:23 2680:5	2592:3 2624:24	2584:8 2599:14	2555:24	green 2501:23,23
2680:7,8	2629:13	2600:13,14,18	2562:18 2565:2	2502:18
2681:3 2682:16	2639:17	2601:8,10	2565:6,8,24	2506:16
<b>future's</b> 2680:14	2640:25 2663:8	2603:11	2579:3 2585:7	2514:23,25
<b>F-1</b> 2631:9	2665:20	2606:18 2614:5	2590:23 2591:1	<b>group</b> 2520:6
	2690:19	2627:5 2631:23	2592:6 2593:14	2527:22 2569:8
<u> </u>	given 2471:21	2631:25	2599:10,13,20	2581:15
<b>G</b> 2463:2	2497:22	2637:18 2638:5	2603:1 2627:11	2582:22
gas 2555:14	2602:23	2643:10	2628:24 2631:6	2613:10 2624:8
2608:19	2604:17 2610:7	2644:10	2644:9 2658:7	grow 2532:16
gathered 2492:1	2617:3 2621:21	2645:11,17	2660:3 2664:20	2652:15 2653:1
2527:16	2688:13	2658:15	2666:4 2667:13	<b>growth</b> 2530:10
general 2478:6	gives 2563:6	2661:16	2668:20 2671:7	2531:15 2532:2
2549:2 2559:5	giving 2505:25	2664:25	2672:19 2679:5	2532:6,10
2559:20 2561:9	2511:11 2574:4	2676:14	2680:14 2684:2	2533:13
2602:17	2627:24 2690:7	2677:17	<b>good</b> 2468:18	2562:25
2613:13,21	<b>glad</b> 2604:5	2681:25 2691:1	2482:4,5	guarantee
2614:5 2624:24	<b>global</b> 2468:22	<b>goals</b> 2637:25	2485:9 2521:6	2612:11 2619:9
2636:8 2667:15	2468:23 2522:3	goes 2504:9,10	2531:15	guess 2484:22
2668:25 2669:3	2522:10	2669:1,4,10	2542:23,24	2518:7 2530:23
2669:19	2537:12	<b>going</b> 2464:1	2546:21,22	2574:12 2579:4
generally 2543:7	2628:20	2468:2 2472:8	2553:4,5	2602:14
2598:10	2629:21	2472:10	2570:11	2662:20 2665:3
2602:13	globalization	2473:15,17	2583:17 2585:6	2668:14,17
2619:20 2670:1	2497:25	2476:3,9	2590:7,8	2669:9
	I	l	I	l

<b>guys</b> 2544:17	happen 2465:18	head 2474:11	2627:18	Holy 2628:4
2552:11	2466:7 2544:24	2550:8	2628:21	honor 2463:10
gypsum 2483:16	2548:12 2553:8	healthy 2532:7	2669:24	2463:13 2464:3
2483:18,19	2565:2,6,8	hear 2522:12	<b>helpful</b> 2481:25	2464:6 2466:13
2484:1	2568:6,10,14	2573:1 2592:5	2573:7	2466:17 2467:1
	2568:17 2591:1	2652:17	helps 2531:22	2467:16
H	2664:7,11	heard 2488:12	2561:4 2584:3	2474:11
<b>H</b> 2671:12	2676:8 2681:19	2498:1,2	Henry 2596:9	2475:17 2476:5
<b>HALAG</b> 2692:16	2682:1 2686:18	2500:12	2693:8	2476:13 2479:5
half 2534:16	happened 2575:7	2507:22,24	hereto 2696:17	2479:17 2481:2
2555:19	2575:13	2526:1 2539:7	herring 2478:20	2481:9 2485:16
2673:19,24	2590:21,25	2578:13	hey 2512:4	2518:7,8
2674:16	2640:12	hearing 2460:4	Hi 2583:16	2524:16,25
<b>halfway</b> 2533:9	2665:11	2463:3,6	high 2496:13,20	2525:3 2526:12
<b>Hall</b> 2460:17	<b>happens</b> 2653:3	2481:7 2526:19	2629:12,22	2526:18
2546:17,18,20	2663:14 2665:4	2527:12 2528:8	<b>higher</b> 2471:18	2527:11 2528:7
2548:19 2553:6	2665:4,5,8	2528:21	2471:19	2528:20
2572:17,18	happy 2466:23	2544:14,19	2521:23	2534:19
2576:19,21,24	hard 2505:21	2568:21 2572:2	2665:16 2672:6	2542:16
2585:3,5,24	2677:19,24	2575:8,9	2675:19	2548:16 2554:2
2590:4,6	<b>Harris</b> 2592:7	2578:19 2589:9	2683:12,21	2555:4,25
2591:4 2595:17	2593:24,25	2594:24 2597:4	highly 2463:12	2558:14
2595:18 2623:4	2693:5 2694:20	2603:15	2511:5 2518:2	2569:11
2623:5,7	2694:21	2611:21	2528:24 2529:4	2571:21 2587:3
2630:24	Haslag 2570:7,13	2690:16 2691:6	2531:2 2539:24	2587:7,11,14
2635:16 2640:9	2570:14,16,25	hearings 2578:17	2541:6 2548:13	2589:5,10
2661:4,6	2694:22,23	2578:22	2569:14	2591:10,15,25
2667:4 2668:12	Haslag's 2571:22	heavier 2649:25	2599:18,19,24	2592:3,12,13
2672:2 2675:13	hat 2469:6	hedging 2657:6	2600:4	2593:1,16
2692:10,22	Hawesville	held 2464:8	historical 2495:5	2594:19
2693:3,12,24	2599:3,4	2476:18	2513:23 2514:1	2596:24 2597:9
<b>HAMPTON</b>	2608:7,9,16	2518:11	2563:19	2599:23
2462:14	2609:3 2639:10	2538:11 2540:2	2679:10,11,12	2600:21 2601:8
hand 2485:19	HC 2463:12,16	2543:19	2679:14	2602:9 2603:23
2534:21 2567:5	2476:14,15	2548:22	history 2472:25	2610:14 2611:7
2581:23	2481:4 2518:6	2553:19 2556:4	2482:9 2488:6	2611:17
handed 2571:5	2530:20 2538:6	2558:18	2506:19,23	2644:21 2646:3
2594:12	2539:23 2540:1	2569:24 2592:2	2509:11	2671:3 2680:17
2596:17	2548:17,20	2599:12	hit 2584:17	hope 2590:10
<b>handle</b> 2646:12	2555:25	2601:12 2632:3	2606:20	2599:1 2674:14
<b>handled</b> 2647:3	2558:14	Hello 2583:15	hold 2563:11	hopeful 2475:1
<b>Hanes</b> 2482:19	2569:11	help 2495:8	2570:20,22	hopefully 2476:9
2482:20,22	2571:12,24	2533:25 2584:2	2581:17	2476:11
<b>hanging</b> 2681:16	2602:5,19	2613:14	2600:17	2593:11 2691:2
Hannibal	2603:10,13,13	2620:21	Holding 2485:24	hoping 2592:5
2609:17,22	2631:5	2621:14 2622:7	Holly 2627:18	hotel 2592:5
2630:7,8	HC/NP 2694:17	2624:25	2628:5,11	hour 2663:10,11
, -	110/111 20/7.1/	2027.23	2020.5,11	11001 2003.10,11

2689:19 2690:3	2578:6,9	2563:8	2683:9,22	2484:10 2485:2
hourly 2621:19	2579:13,15	improvements	2689:7,7	2492:2 2517:13
hours 2585:1	2587:7 2593:21	2544:25 2545:1	increased	2521:20
2651:14	2594:19 2596:6	2567:11	2563:15 2610:2	2560:25 2604:9
huge 2475:7	2596:24	inappropriate	2660:11	2604:16
2584:3	2599:23 2600:5	2466:4	2673:16 2682:7	influence
Humphreys	2602:8 2639:3	<b>inclined</b> 2592:18	2682:8	2486:25 2487:8
2495:12	2643:4 2692:17	2600:13	increases	2487:17 2488:3
2497:19	2693:6,9,17	<b>include</b> 2515:19	2681:22	2488:8,10
2499:15	<b>imagine</b> 2619:17	2517:21	incremental	information
2503:20,23	2657:4 2658:1	2567:12 2603:4	2469:25	2465:7 2492:1
2505:18	impact 2472:2	2617:5,17,18	2471:25	2492:1,22
hundreds	2511:12	2619:8 2676:20	2640:23 2663:5	2493:7 2498:3
2598:19	2519:11	<b>included</b> 2512:24	2663:5 2687:7	2499:19
2615:10	2521:10	2514:4 2563:25	2688:13,25	2503:10
HWF-1 2598:4	2541:18	2567:10 2569:8	2689:8,16	2512:25
2599:16	2555:17,18	2571:15	incurs 2623:20	2515:24
<b>hydro</b> 2629:2,5	2567:6,16	2594:16	independent	2559:16 2561:6
hydroelectric	2624:5 2644:2	2596:21	2477:10	2567:7 2590:18
2614:20	2647:24 2648:6	2618:23	2487:25	2590:20
hypothetical	2648:8,18,22	including 2477:6	independents	2599:15,16,18
2490:20 2658:4	2651:12	2512:11	2477:12	2599:25 2600:3
	2652:13	2561:10	index 2641:16	2600:10,10
1	2665:15	2682:10	2692:1	2602:9,11,13
ice 2473:9	2668:18,22	2687:15	<b>indexes</b> 2656:23	2602:20,24
idea 2492:25	2669:1,3	income 2549:13	indicated	2603:3,5,6,7
2584:22	2670:7,8,14,21	2551:2	2557:12	2637:24
2630:16	2672:14,22	<b>incomes</b> 2524:18	2613:18 2618:4	2653:18
2665:18	2682:2	inconvenience	2629:19	2655:21 2656:9
identified 2525:4	impasse 2469:24	2592:17	indicates	2679:11,12,13
2557:12 2560:6	2470:10	incorrect	2465:11	2680:5
2566:1 2568:21	<b>implicit</b> 2502:17	2606:21	indicating	<b>inherent</b> 2470:16
2618:9 2620:13	2515:16	2658:11	2566:7	2625:18
2621:7 2667:12	important	increase 2460:10	indifferent	initial 2626:18
identify 2466:6	2493:11 2560:1	2521:14	2469:19	initially 2586:6
2525:17 2580:3	2576:16 2584:1	2563:16	indirectly 2521:9	2618:18
2658:23	2628:6	2584:13	individual	inputs 2510:24
2671:12	imposed 2615:18	2646:23 2647:1	2518:5	2519:21
ignore 2507:9,20 Iles 2461:12	2642:22	2647:6,24	industrial 2462:1	2580:20
	imposition	2664:18,21	2636:1,18,20	inquire 2587:13
2570:10 2571:21	2636:15	2669:6,18	2637:12,23	2593:19 2634:2
2571:21 2572:23	impossible	2673:12 2674:1	industrials	inquiring 2634:6
2572:25	2606:16	2674:5,8,12	2584:16	2654:11
2574:18,23	improper 2574:3	2675:1,15,20	Industries	insisted 2626:4
2574:16,25	improve 2620:21	2678:18	2521:17	instance 2629:11
2573.3,0	2621:14 2622:7	2681:10,11,24	industry 2482:23	insufficient
2311.1,12	improvement	2682:4,10	2483:23	2640:21 2642:1
	1	1	1	1

integrated	investment	2585:8 2626:24	2526:15,19	2605:18 2611:9
2598:15	2561:22	2643:3 2649:9	2527:9,12	2611:19
intelligence	2617:20	2667:23	2528:4,8,18,21	2622:18 2623:1
2488:16	2618:14	2679:20	2534:20 2538:9	2623:4 2631:1
2517:13	2619:10	issued 2647:12	2539:2 2540:1	2631:21 2632:1
2522:13	investor 2526:8	issues 2478:5	2542:18 2543:7	2635:12
<b>intended</b> 2640:24	2526:22 2603:6	2484:24	2543:16	2638:23 2643:5
2641:24	investors 2489:3	2551:14 2552:8	2546:17 2549:2	2643:10,15,18
2642:22	2525:22	2552:9 2561:24	2549:7 2552:18	2644:4,9,13
intensive	2526:24 2527:4	2574:2 2618:16	2553:17	2645:7,11,16
2537:13	2530:6,8	2686:16	2554:12,15,18	2645:23 2646:1
2613:11 2636:1	2531:7 2532:15	item 2567:4,25	2554:20 2555:2	2653:9,10
2636:18,20	2532:21 2536:5	items 2465:23	2556:1 2558:16	2656:12
2637:12,23	2544:12	2541:21 2567:2	2559:4 2569:12	2659:10 2661:4
<b>intent</b> 2616:2	2545:21 2546:3	i.e 2561:23	2569:17,22	2667:6 2668:5
2618:19	2546:11 2547:1		2570:2,6	2671:2 2675:8
<b>interest</b> 2561:10	2548:2	<u>J</u>	2571:24 2572:3	2675:9 2678:7
2600:6	<b>involved</b> 2581:13	J 2637:20	2572:6,8,11,13	2680:18 2684:5
interested	2582:12,14,15	JAMES 2461:7	2572:17,19,23	2690:12,14,19
2583:24	2582:20,23	<b>January</b> 2523:13	2573:9,14	2690:22,25
2696:17	2585:15 2611:2	2618:6	2574:7,15	judgment
interesting	2639:11,22,22	Jefferson 2460:6	2575:17	2614:10
2627:3	2642:15 2646:7	2461:18 2462:4	2576:19,23	2636:16
interests 2638:15	2688:15	2462:8,11,16	2578:12,15,23	2689:21
interface	involvement	2578:18 2696:6	2579:8,14,21	judgments
2660:22	2581:11	<b>job</b> 2482:9,15	2579:25 2580:2	2499:20
<b>interior</b> 2484:11	<b>involves</b> 2639:10	jobs 2615:6	2580:23	judicial 2554:3
internal 2492:2	involving	<b>JOHN</b> 2462:19	2581:25 2585:3	2554:10
2503:4,7	2611:14	Joseph 2570:13	2586:1,7	<b>jumping</b> 2559:2
2519:24 2520:6	in-camera	2692:16	2587:4,9,13	June 2470:22
internally 2524:9	2464:8 2476:18	journey 2474:13	2589:7,12,15	justification
International	2518:10,11	judge 2460:15	2589:17,19,22	2663:2
2587:21	2538:9,11	2463:4,15,19	2589:24 2590:4	
interpretation	2540:2 2543:4	2463:24 2464:4	2591:6,11,18	<u>K</u>
2530:22	2543:11,17,19	2465:2 2466:15	2591:22 2592:1	keep 2545:3
interpreted	2548:22	2467:4,7,13	2592:8 2593:8	2546:8 2624:16
2501:6	2553:17,19	2468:6,10	2593:14,17,19	2640:15 2641:3
interrupt 2531:3	2556:4 2558:18	2475:19,22	2594:22 2595:4	2688:6 2689:2
interval 2605:13	2569:24	2476:2,7,15	2595:6,8,10,12	keeping 2548:7
2656:5	2601:12 2632:3	2478:3 2479:6	2595:15,17,20	Ken 2461:12
introduce	issue 2470:11	2479:10,15	2595:22 2597:2	2518:2 Konnov 2460:16
2645:14	2475:5,7	2481:4,10,13	2597:8 2599:22	<b>Kenney</b> 2460:16 2460:17
introducing	2478:22	2481:15,18,20	2600:9,12,16	2460:17 2463:23 2478:9
2643:19	2544:16	2481:21,25 2485:18 2518:6	2600:20,22	2463:23 2478:9 2542:22 2543:8
invalidate 2660:9	2549:13 2550:5	2485:18 2518:6 2518:9 2519:2	2601:9 2602:2	2542:22 2543:8 2543:12
invest 2612:19	2550:6 2551:25	2518:9 2519:2 2524:19,24	2602:21 2603:9	2543:12 2549:11,17,20
2615:9	2577:6 2579:2	2324.17,24	2603:18,20,24	∠J+7.11,1/,∠U
	I	i		

2549:23 2550:2	know 2466:23,24	2685:16 2688:6	lawyer 2585:13	2507:17 2508:5
2550:9,13,16	2470:6 2471:6	<b>knowing</b> 2655:15	lawyers 2686:10	2510:3,4
2550:23 2551:1	2472:8,9	knowledge	2688:7	2525:17 2527:2
2551:6,16,24	2474:16	2486:13,15	layoff 2472:18	2527:21
2552:4,11,16	2475:12,12,13	2502:22	layoffs 2472:17	2529:16,17,18
2572:16	2478:18	2522:10	2473:2,25	2537:21 2539:4
2574:11,16,21	2484:21 2491:2	2580:19	2474:1	2543:14
2575:1,4	2493:13,14	2667:22	lead 2580:9	2548:19 2549:7
2577:7,14	2495:4,17,17	<b>KPMG</b> 2483:3,9	leaders 2503:6	2549:15 2555:8
2578:4,7	2495:21,22		lease 2570:12	2557:2 2559:11
2579:1 2581:1	2497:9,10	L	leave 2612:22	2565:13
2581:4,23	2498:11	L 2460:15	<b>leaving</b> 2683:18	2567:18 2571:1
2582:2 2583:10	2499:18 2502:2	2461:16	<b>LED</b> 2550:11	2602:4 2627:18
2583:14 2585:6	2504:20	labeled 2537:24	<b>left</b> 2463:6	2635:2 2636:12
2590:2 2595:14	2513:17 2516:3	labor 2561:23,24	2470:6 2516:14	2637:1,18
2595:15,16	2522:8 2523:2	2621:7,13	2567:5 2629:1	2643:10 2657:4
2622:21,24	2523:6,21,24	2622:13	legal 2643:1	2658:1 2680:21
2623:1,2	2534:6 2545:6	lack 2625:2	legislation	level 2471:18,20
2659:14 2661:2	2546:7 2552:17	lacked 2491:10	2613:7 2625:16	2473:12 2554:4
2692:9,20,21	2553:12,14	2515:15	2625:17	2563:15
2693:23	2574:17	lag 2590:19	2626:15 2638:1	2610:16 2612:7
Kenny 2572:15	2575:21	language	2641:14	2617:7,13
Kentucky	2586:17,19	2550:19	2667:16 2668:1	2621:17 2636:2
2607:16 2608:6	2587:1 2590:25	large 2475:9	legislative	2636:4 2651:14
2608:10 2609:2	2591:1 2598:24	2584:24 2648:9	2625:23 2626:3	2662:14
2624:14	2618:11	2649:1,13	2637:25	levels 2610:12
2626:24,24	2619:11	2650:2,22	legislature	<b>Lewis</b> 2461:7
2627:4 2639:9	2622:15	2652:12,13	2613:8 2626:15	life 2557:18,22
kept 2610:5	2628:20 2629:3	2669:3,19,21	2636:1 2667:25	<b>lighting</b> 2550:11
<b>KEVIN</b> 2462:14	2630:11 2636:8	2669:25 2670:2	length 2491:15	2670:4
key 2533:18	2636:11,23	2689:12	2491:20 2492:8	likelihood
2541:12 2562:2	2637:15 2638:2	larger 2471:23	2492:14 2493:6	2547:19
2567:13	2638:19,21	2558:13	2493:11,11	likewise 2483:8
killing 2466:20	2642:6,13,24	2628:14	lessor 2504:14	2484:24
kilowatts 2670:3	2644:12	2683:19	2584:10	2487:20 2532:1
kind 2470:16	2646:15,18	largest 2468:20	letters 2539:12	limited 2522:10
2475:16 2509:5	2648:4,15	2620:14 2621:8	let's 2463:4	2616:23 2652:3
2574:5 2579:2	2657:16,18	2623:22	2467:11,18	2652:16 2653:1
2590:14	2660:23	<b>lasted</b> 2641:15	2470:19	line 2473:13
2613:13 2660:3	2666:21,22	late 2593:12	2472:16	2493:22 2494:3
2676:16	2667:14 2668:3	lately 2681:10	2475:25	2494:4 2495:15
2688:23	2676:3,9,15	latest 2608:20	2488:12	2496:5,7,7
kinds 2498:6	2677:13,20	2626:12,12	2490:23	2501:23,24
2510:13	2678:2 2679:6	Law 2460:15	2491:15	2503:16 2504:9
2529:22	2679:7,8	2461:7,11,12	2493:10	2504:14
<b>Kip</b> 2618:7	2680:14,23	2461:12 2462:3	2495:24 2502:8	2505:17
2692:3	2681:19	2462:6,7	2503:16,19	2506:15
	_	<u> </u>	<u> </u>	

				_
2514:21 2515:2	2478:14 2482:8	2554:13	2585:13	lowery@smith
2535:17	2482:13	2561:20	2627:10 2657:1	2461:10
2536:22 2542:2	2487:12	2629:23	2671:9 2672:20	<b>LPS</b> 2648:12
2542:8,12	2500:20	2636:19	2675:13 2676:4	<b>LTS</b> 2661:13
2544:5 2546:24	2503:11 2504:8	long-term 2537:1	2688:14	lunch 2549:3,6,8
2558:9,10,12	2514:17	look 2474:10	looks 2495:19	Lynch 2522:23
2561:3 2592:21	2517:22 2521:2	2491:23 2496:4	2534:24	2522:25
2605:21	2529:16,18	2496:5,7	lose 2689:2	
2607:20 2609:1	2533:9 2535:25	2499:14	loss 2541:24	M
2629:9 2663:3	2537:21 2555:8	2501:16	2663:22 2664:1	macroeconomic
2675:13	2557:2 2626:6	2516:11,11	<b>lost</b> 2665:13	2519:10
lines 2473:7,8,11	2678:11	2517:20 2520:6	<b>lot</b> 2469:15	<b>Madison</b> 2462:11
2475:10 2497:5	live 2592:23	2524:12 2526:7	2482:25 2542:1	2462:16 2696:6
2506:23 2509:5	2619:9	2526:9 2527:2	2580:17	<b>Madrid</b> 2465:8
2509:17 2542:2	<b>LLP</b> 2461:7,13	2527:21	2657:20	2478:19
2548:9 2558:11	2461:21 2462:3	2529:16,19	2658:18 2687:1	2557:24 2567:5
2561:18	LME 2609:23	2532:24 2533:6	2688:23	2613:14,20
2623:11	2610:1,21	2535:4 2536:7	lots 2546:13	2615:16
2663:21	2611:25 2612:6	2559:21	<b>Louis</b> 2460:25	2616:14 2617:7
2685:13	2615:1,4	2560:20 2562:9	2461:5,14,22	2617:21 2618:1
<b>Linton</b> 2481:17	2616:14,19,20	2562:14	2462:20	2619:14
2589:18 2595:7	2617:12,15	2611:12	Louisville	2620:15 2621:9
2603:21,22	2619:6 2641:16	2627:18	2608:19	2628:12
liquidity 2464:2	2641:18,19	2649:21	<b>love</b> 2571:9	magnitude
2510:20	load 2663:2,14	2663:25	low 2496:3	2660:17
2539:11,19	2670:3 2689:9	2670:11	2549:13 2551:1	main 2522:15
2543:1 2553:7	2689:12	2678:13	2678:15	2660:5
2553:9 2565:9	loaded 2574:11	2688:22	lower 2496:7	maintain
2568:15 2628:9	loads 2689:14	2689:14	2583:25 2629:6	2610:11 2615:6
2641:20	loan 2472:6	looked 2469:12	2636:14 2637:3	2617:6
2684:14,15	local 2537:18	2490:3 2491:18	2637:20 2638:7	majority 2463:11
2694:13	2578:18,21	2507:15	2683:10,13	2488:2 2585:7
list 2465:24	lock 2657:1,4	2523:17	2688:24 2689:2	making 2545:2
2487:9 2488:9	locking 2657:5	2525:12 2649:9	2689:5	2557:18 2569:7
2560:9 2565:25	lodge 2579:17	2655:2,6	<b>Lowery</b> 2461:7	2586:12
2573:20 2598:1	2650:6	2689:13	2554:17,23	2602:14 2606:6
2628:24	lodged 2579:19	looking 2485:22	2569:13,20	2657:15
listed 2465:23	long 2469:20	2502:18	2573:18	2665:22,24
2578:7 2582:19	2472:11	2505:14	2575:23 2577:8	2688:3,4,21 <b>Mallin</b> 2461:12
listening 2561:7	2475:10 2506:9	2519:21 2520:8	2577:17	2463:10,17
literally 2472:6	2506:17	2529:18	2579:17,23	′
LITIGATION	2517:15	2537:23	2586:4,9	2464:1,6 2465:4 2466:13
2460:24	2533:20 2534:4	2559:18,23,25	2587:2 2644:21	2466:22 2467:6
little 2467:11,18	2534:10	2560:4,14,16	2656:15 2659:8	2467:9,11,16
2470:19	2535:14,18	2560:22 2561:3	2678:9 2680:16	2467:18
2472:16,24	2536:14,20	2561:8 2564:17	2684:2 2692:23	2468:10,11
2476:10,11	2537:1 2543:2	2565:20	2693:22 2694:4	2400.10,11
	1	1	1	1

2475:17,21,25	2525:7 2571:11	2509:9,9	2470:6	2575:2,25
2476:5,13	2594:12	2512:5 2513:21	meetings 2469:6	2577:11,12,16
2477:2 2479:5	2596:17 2602:7	2514:14 2531:1	2469:11 2603:6	2577:18,22,25
2479:13,16,19	2602:19 2611:8	2545:10	megawatt	2578:1 2580:5
2481:2,8	2643:25	2563:18	2651:14	2580:7 2584:6
2518:4 2526:17	2663:16	2574:12	2663:10,11	2586:12
2527:11 2528:6	market 2488:16	2576:13	2689:19 2690:3	2646:18,22
2528:20 2529:7	2488:20	2577:11 2651:9	members	2687:16 2694:9
2530:11,14,17	2499:13	2686:15	2487:21 2488:3	MIEC's 2576:6
2531:4 2538:4	2500:25	meaning 2501:3	2488:10	mill 2465:8,12,16
2539:22	2502:13,20	2536:12,24	2577:13	2465:19 2466:8
2548:16	2521:9 2522:18	2563:15	2582:22 2584:6	2470:20 2471:4
2553:14	2524:11,12	means 2511:25	2627:22	2471:11,14,20
2554:13,22,25	2530:9 2531:16	2590:17	memory 2505:20	2539:16 2569:5
2555:4,7,24	2532:1 2599:5	2619:24	2597:14	<b>million</b> 2471:13
2557:2 2558:14	2603:10,13	meant 2511:19	<b>mention</b> 2543:2	2471:24 2472:6
2559:2,6	2608:14 2609:6	2533:24 2534:6	2611:1 2627:13	2472:9,10
2569:10	2619:16 2637:8	measured	mentioned	2557:7,9,11,21
2587:11,14,16	2655:12,21	2545:16	2470:10	2563:8 2564:2
2589:5,10	2656:22	MEB 2662:21	2474:22	2564:9,22
2591:10,15,20	2663:16	MEB-COS	2482:10 2526:5	2565:1,5
2591:23 2592:3	2664:10	2647:16 2648:3	2558:3 2577:3	2567:6,12,14
2592:12,24	2667:13 2683:5	2648:15	2641:10	2567:15 2568:1
2593:12,15	2689:5	2651:13	2679:24	2568:8,12
2692:4,7,14	markets 2519:7	2671:16	2681:13,14	2612:25
2693:2	2520:15	2672:20 2687:2	Merrill 2522:23	2628:17
man 2592:23	2529:22	MECG 2462:6	2522:25	2661:21 2662:1
manage 2539:10	2532:21,21	2481:13 2572:6	message 2541:14	2662:3,7,10
2539:16	2561:11	2582:21	met 2469:5	2663:23 2664:4
managed 2539:9	2580:19	2589:15 2595:4	metal 2482:23	2670:16,18,19
management	2658:19	2597:8 2631:23	2483:11	2670:22
2562:2 2587:25	Massena 2614:14	2646:1 2671:2	2484:14	2671:13,22
2622:1	2615:11	2695:8	2630:17,20	2672:10,13,17
managing 2594:3	material 2523:23	mechanic 2622:9	metals 2483:9	2672:23 2673:9
manpower	materially	mechanically	2484:24	2674:2,4,12,18
2473:11	2560:3 materials	2620:10,23 2621:23	methodology 2649:12	2674:21,21,22 2674:24
manufacturing 2670:2	2561:13	median 2534:3	Metropolitan	2674.24 2678:12,15
March 2460:5	math 2509:25	medical 2618:16	2670:9	2681:13,14
2581:21	2511:10	medium 2533:20	Michael 2469:4	millions 2598:19
margin 2512:16	matter 2460:9	2534:10	microphone	2615:10 2673:9
2663:14	2494:12 2542:7	2535:14,18	2569:15	mind 2483:13
mark 2524:17,21	2573:2	2536:13,20	MIDWEST	2503:19
2525:1,3	matters 2487:1	2537:1 2670:2	2460:24	2591:25
marked 2464:1	MATTHEW	MEEIA 2549:14	MIEC 2466:19	2684:10
2485:21	2461:4	2551:2 2647:2	2573:2,4,4	mine 2598:16
2524:22 2525:2	mean 2495:3	meeting 2469:11	2574:3,10,24	mined 2483:19
	<u> </u>		<u>l</u>	<u> </u>

	<u> </u>	1	1	
minimis 2670:7,8	2517:10	2649:4,7,12	N 2460:24 2463:2	2470:3,9
minimum	<b>mitigate</b> 2667:19	2651:1,3	2664:24	2581:14 2582:7
2610:11,16	mitigating	2652:10,20,21	2665:14	negotiation
2615:6 2617:6	2668:2	2655:23 2656:4	name 2479:20	2585:16
minor 2550:6	<b>Mitten</b> 2461:16	2656:19	2570:12 2573:5	negotiations
minus 2512:15	2572:12	2672:21 2675:4	2580:4 2582:21	2465:13
minute 2493:10	2603:19	2677:3 2687:3	2587:17	2468:18 2469:2
2495:24,24	2605:20 2611:7	months 2482:13	2593:22 2596:7	2469:8,9
2497:2 2545:25	2611:11,17,22	2576:6 2581:14	2596:9	2582:12,15,16
minutes 2475:21	2634:6 2635:14	2582:6,12	narrow 2551:22	2582:20,23
2591:21	2640:13 2641:6	2590:22	<b>National</b> 2483:16	2642:16
mirror 2590:13	2642:2 2693:11	2605:12 2621:1	2483:18 2484:1	2659:24
2590:25	2693:16	2622:13 2641:4	natural 2555:14	neither 2470:18
2657:22	mixed 2526:4	2657:9 2676:25	<b>nature</b> 2466:11	2696:12
mischaracteriz	<b>MO</b> 2460:6,25	2677:1,2	2547:5 2560:24	Nelson 2461:20
2468:3	2461:5,9,14,18	morning 2482:4	2578:18	2481:22 2482:3
misleading	2461:22 2462:4	2482:5 2542:23	near 2501:15	2485:16,19
2504:21	2462:8,11,16	2542:24	2502:17	2518:2,7,8
misquote 2505:9	2462:20 2696:6	2546:21,22	2515:18	2519:4 2524:16
missed 2550:3	model 2498:7,8	2570:11 2691:2	2517:14,16,18	2524:20,25
2634:11	2502:2 2506:21	<b>Morris</b> 2460:15	2520:8 2679:4	2525:8 2526:12
Missouri 2460:1	2508:25 2509:7	2693:19	nearly 2690:25	2526:21 2527:7
2462:1,19	2509:14,19	mothballed	necessarily	2527:14 2528:2
2481:16	2510:4,5,8	2630:12	2546:3 2551:19	2528:10,16,23
2586:11	2511:7 2513:25	move 2466:13	2604:24	2529:9,11
2589:17 2595:6	2515:15 2516:4	2481:2 2510:4	necessary	2530:13,15,25
2597:15	2516:15 2517:3	2519:15	2680:11,13,24	2531:6 2534:18
2603:18,20	2537:22	2526:13 2527:7	need 2467:1	2534:21 2538:1
2604:19	2539:18,21	2528:2,16	2475:18 2497:3	2538:3,7
2605:13 2614:5	<b>models</b> 2508:1	2571:21	2497:7 2546:8	2539:4,25
2614:11,19	2536:16	2572:13 2589:5	2551:20	2541:2,4
2617:25	modification	2596:24	2569:10 2570:7	2542:16 2543:6
2634:22 2636:8	2643:21	2611:17	2572:21 2593:1	2554:2 2555:1
2636:23	modified	2636:12 2637:1	2593:3 2595:24	2589:23
2637:15 2638:2	2585:16	2659:18	2600:14 2601:7	2592:13
2638:19 2656:5	Moehn 2469:4	movement	2631:25 2647:9	2595:11 2692:8
2686:11 2696:5	2470:8	2626:15	2652:17	2692:13
Missouri's	moment 2611:12	MSO 2664:10	needed 2491:12	net 2653:4
2460:10	2612:4 2635:3	Mt 2627:18	2539:10	2663:21
2607:10	Monsanto	2628:4,5,10	needs 2553:13	2677:24 2678:1
2613:12,20	2573:5 2577:3	multi 2628:19,20	2561:22	neutral 2647:20
2617:11	2577:5 2580:9	multiple 2516:9	negative 2506:10	never 2479:2,3
2654:16	2583:18,21,24	2628:13 2644:5	2506:18 2513:4	2488:2 2498:8
2657:10 2676:1	Monsanto's	mutually	2513:13 2520:3	2516:4 2575:22
Missouri-Colu	2577:4	2551:21	negotiated	2577:25 2602:7
2570:17	month 2555:23	N	2685:17,23	2614:3 2626:2
misunderstood	2605:6 2648:22		negotiating	2641:9 2642:23
	1	1	1	1

2684:9	2467:20 2468:4	2649:14,19	2670:15	2634:12 2646:8
new 2465:8	2468:13	2650:4,4,12,19	2673:20	2647:7 2649:24
2478:19 2485:3	2470:22 2471:1	2650:23 2651:6	2674:17 2678:4	2655:1,5
2485:4 2532:18	2471:10 2472:2	2651:10,15	normal 2555:13	2658:1 2672:24
2557:24 2567:5	2472:18,21	2652:2,14	2557:22	2672:25 2673:2
2575:20	2473:24	2654:16,17	2610:21 2666:5	2673:3 2674:15
2598:21	2474:19	2656:18	2666:6 2670:20	2675:5,14
2613:14,20	2479:10,23	2657:11 2658:2	2670:20	2677:24 2678:1
2614:15	2480:17,21	2658:10	2686:16 2688:2	2683:6 2685:14
2615:16,18	2482:10	2659:18,23	2688:19,21	<b>numbers</b> 2499:8
2616:7,13	2485:24 2487:8	2660:20	2689:10	2502:19 2518:5
2617:7,20	2498:9,15	2661:11	North 2461:13	2530:1 2543:15
2618:1 2619:13	2519:5 2520:15	2663:17 2664:8	2462:24	2571:8 2624:8
2620:15 2621:8	2521:10 2522:9	2666:9,19	Northeast	2627:12 2631:7
2624:14 2625:3	2539:20	2667:22	2462:24	2645:4 2647:19
2625:6,6	2544:11	2672:22	note 2464:8	2649:22 2663:9
2628:12 2634:3	2545:11	2673:18	2465:14	2673:6 2675:3
2634:9,17	2555:11,22	2675:24	2466:17	2679:4,17
2636:17 2645:4	2557:4 2559:14	2676:21 2677:7	2476:18	numerous
2661:11 2665:9	2560:18 2562:6	2678:1,23	2518:11	2577:23
2681:12	2562:18 2563:5	2681:21 2682:2	2538:11 2540:2	<b>NYPA</b> 2614:16
news 2478:6	2566:10,15	2682:5,6,21,25	2543:19	2614:18,24
nice 2482:6,7	2568:7,7,23	2683:7,10,11	2548:22	<b>N-Y-P-A</b> 2614:16
2622:21,23	2574:5 2576:7	2683:12,13,17	2553:19 2556:4	
2674:15	2583:19,22,25	2684:1 2686:1	2558:18	0
nominal 2509:12	2584:2,4	2688:18 2689:8	2569:24	<b>O</b> 2463:2
non 2682:10	2597:15	2689:9,16	2601:12 2632:3	oath 2535:1
nonimplement	2598:24	2694:14	noted 2549:12	2586:10
2676:5	2602:10,20	Noranda's	2579:22 2607:5	2643:16
nonprofit	2603:2 2604:20	2465:9 2471:15	notes 2576:12	<b>object</b> 2468:2
2577:12	2607:7,22	2477:5,21	2696:11	2477:23 2574:6
nonunanimous	2613:12,19,21	2485:10 2503:4	<b>notice</b> 2554:3,10	2644:21 2684:2
2550:17 2551:7	2613:25 2614:4	2509:6 2521:5	<b>notices</b> 2472:18	objected 2626:9
2574:13	2615:14,17,22	2525:21	November	objection
2575:14 2581:6	2615:25 2616:5	2532:21	2480:22	2466:16 2478:4
2581:22	2616:11 2617:2	2533:25	2482:11	2481:5 2526:16
2582:25	2617:6,10,19	2561:18,18,25	<b>NP</b> 2481:5	2526:17
2585:10	2618:4 2619:9	2562:2,9	2571:24	2527:11
2643:23	2620:4,12,13	2568:15	<b>nuclear</b> 2614:21	2554:12
2644:25 2645:1	2620:21,25	2597:21 2600:6	<b>number</b> 2465:23	2571:25
2653:19 2654:4	2621:7,14	2616:12	2468:19 2477:4	2573:16,19
2672:14	2622:12	2617:23 2618:7	2539:24 2543:2	2579:17,20,21
2681:20	2628:17,19	2618:21 2619:5	2546:23	2589:8 2594:23
non-legal	2634:22 2640:1	2620:8 2622:7	2561:19 2601:4	2644:12,19
2660:12	2642:4,6,13,22	2624:10 2648:7	2605:22,25	2645:10 2650:7
<b>Noranda</b> 2462:2	2646:19,22	2649:15	2606:24 2607:2	2654:7 2684:6
2465:18 2466:6	2647:5 2649:2	2654:15	2611:10 2615:6	objections
		I	I	I

2527:10 2528:5	2659:17	2543:16	2675:18	2689:10,15,22
2528:6,19	2690:15	2546:15	2676:10,18	2689:24 2690:2
2597:3 2603:13	offering 2645:12	2548:11,19	2677:2,16,22	opportunities
2611:20	2645:20	2563:3,13,20	2681:6,19	2532:16
2644:16	<b>Office</b> 2462:7,9	2567:20 2570:5	2682:11 2684:9	opportunity
2690:15,16	2582:17	2570:25	Oklahoma	2579:7 2618:13
objectives 2564:2	officer 2479:25	2576:23	2462:25,25	2639:18
<b>obligate</b> 2617:10	2486:6 2578:10	2580:23	<b>old</b> 2478:6	2678:23
2617:19,23	2586:12	2582:25 2585:2	once 2682:7	<b>opposed</b> 2650:9
obligated 2615:6	officers 2577:20	2585:23 2591:3	ones 2499:6	2686:22
2615:9	offices 2503:6	2592:1 2594:5	2522:15 2630:2	<b>option</b> 2598:25
obligations	offsets 2664:20	2597:20 2598:3	one-on-one	2635:5 2641:5
2616:5	2677:23	2598:7,17	2469:10	2642:14
observation	oh 2512:15	2599:2,8,22	one-third	<b>options</b> 2688:13
2503:8	2629:8	2600:12,14,16	2619:21	2688:14,15
observations	<b>Ohio</b> 2607:16	2600:20 2601:6	ongoing 2465:13	order 2463:4
2490:3	2609:15,22	2604:15,23	2620:8	2473:15,17,21
obtaining 2564:1	2610:5,9,19	2624:9 2625:12	<b>OPC</b> 2686:19	2480:20
<b>obvious</b> 2690:8	2612:3 2615:18	2625:21 2632:1	open 2542:18	2508:24
obviously 2470:7	2616:7 2624:15	2634:19 2635:2	2545:3 2546:9	2533:17,24
2472:4 2474:11	2625:13,23	2635:10	2548:7,14	2549:7 2573:19
2474:16	2626:19,19	2639:25	2627:12	2610:10
2475:12	2630:6	2641:10 2642:2	2663:16,16	2611:14
2627:25	okay 2463:22,23	2642:24 2643:5	opening 2478:1	2626:12,13
occasionally	2465:25 2467:6	2644:4,9,18	2500:12	2637:4,21,22
2489:1 2490:16	2468:6 2479:16	2645:19	2537:23 2544:3	2638:8 2647:10
occur 2494:7,10	2486:18	2646:17,25	2573:1 2577:2	2647:12
2494:16	2495:23,25	2647:4,17,23	2685:2	2679:17 2695:6
2512:20 2513:4	2497:12	2648:3,5,14,25	openly 2546:11	<b>ordered</b> 2676:17
2545:14,18,18	2499:10	2650:1,18	operating	orders 2533:25
<b>October</b> 2480:22	2500:22 2502:6	2651:5 2652:2	2555:13 2558:1	ordinary
2576:2 2583:2	2502:7 2503:14	2652:25 2653:6	operation	2498:14
odd 2552:15	2503:15 2506:1	2654:9 2655:4	2636:17,20	organization
offer 2592:14,24	2506:14	2655:7,17	operational	2578:5,11
2592:25 2593:6	2507:19	2657:6,7	2555:15	organizations
2594:19	2509:15 2510:7	2658:4 2659:7	operations	2628:14
2644:10,11	2514:14,19	2660:24	2488:23	original 2626:7
2690:12	2516:4,25	2661:17,24	2555:22	2670:13
<b>offered</b> 2466:16	2523:11,17	2663:1 2664:6	2561:25 2628:9	originally
2481:5 2526:15	2524:24 2528:1	2665:8 2666:12	<b>opine</b> 2635:8	2471:12 2650:9
2527:9 2528:4	2531:3,12	2668:20 2670:4	<b>opinion</b> 2470:2	2676:19
2528:18	2533:3,12	2670:24	2523:9 2635:4	<b>Ormet</b> 2609:16
2571:25 2589:8	2535:8,9,11	2671:25 2672:7	2635:5 2654:25	2630:2,7
2594:23 2597:3	2536:1,23	2672:13,19	2655:4 2659:17	2640:6
2602:3 2611:19	2539:25	2673:4,7,11,15	2659:22 2678:3	<b>Ormet's</b> 2609:22
2639:6 2644:15	2541:10	2674:4,10,20	2683:16,24	ought 2560:21
2644:19	2542:18	2674:24 2675:6	2688:17	outcome 2487:1
	<u> </u>		l	l

2520:15 2521:5	2552:6,8	2614:12 2632:4	   participate	2468:22
2627:3 2666:1	packaging	2644:5	2531:18	path 2472:12,15
2676:8 2684:8	2532:13	paid 2477:13,20	2560:19	patri 2472.12,13 pay 2602:11
outcomes 2491:4	page 2465:5	2492:23 2542:7	2685:23	2610:20 2612:5
2508:2 2513:16	2486:5,16,17	2542:11 2554:9	participated	2612:11,14
2513:17,20	2486:3,10,17	2610:2 2621:18	2565:21	2617:11,24
2515:17,20 2515:21	2505:14,16	2622:1 2634:3	participating	2627:17
2515.21	2517:23,24	paragraph	2469:22 2562:8	2675:25
2510.12,13 2545:5,23	2530:12	2466:5,5	2566:2,8	2677:18
2545.5,25 2688:14	2530.12 2532:25 2533:1	2487:11,15	2567:8 2568:3	2681:21 2682:7
	2532.25 2535.1 2533:10 2535:4	2533:4,8	particular	2682:9
outcropping 2582:10	2535:10 2535:4	2566:7 2635:23	2466:5 2470:11	
				paycheck 2479:3
outgoing 2598:11	2556:5 2559:14	2636:10,12	2506:22	paying 2658:3 2678:4
outgrowth	2560:11,13	2637:1,19	2514:15	
2583:7	2561:1 2563:3	2638:6	2520:24	payroll 2555:13
outlined 2660:20	2565:23 2566:4	parameters	2522:22 2533:4	peaks 2496:15,17
outlook 2531:8	2566:23,24	2626:18	2564:13 2567:2	2504:5,8,10,21
2533:14	2590:11	2679:23	2567:25	2641:18
output 2510:25	2592:21	paraphrasing	2575:24	penalties
2511:9	2607:18 2608:2	2687:7	2585:21 2617:1	2466:10
outside 2562:1	2608:24	Pardon 2625:5	2655:5,18	people 2473:4
outstanding	2609:13	2662:5,22	particularly	2475:8,23
2532:10	2610:25	paren 2636:14,14	2497:25	2503:5 2517:1
overall 2531:20	2619:19	2636:14,15	2569:18	perceived 2676:5
2623:14	2623:10 2629:8	2637:3,3,20,21	2604:12	percent 2485:11
2624:10 2662:7	2631:9 2635:21	2638:7,8	parties 2476:6	2487:12,24
2668:16 2674:8	2635:24 2662:4	parent 2612:10	2545:24 2551:3	2530:10 2531:8
overhaul	2662:6,20,21	2617:24	2551:10 2552:1	2532:2,6,9
2615:10	2662:22,23	park 2665:18	2552:2 2573:15	2584:9,16,20
overrule 2478:4	2663:1,20	part 2465:9	2573:23 2574:2	2629:14
2684:5	2665:20	2468:24	2581:20	2646:22 2647:6
oversight	2668:14,14	2470:23	2582:17 2592:9	2648:10,13,23
2627:21	2671:9,16	2485:12,20	2595:23 2643:9	2649:3,10,19
owe 2550:10	2672:19	2490:21 2491:1	2646:11	2650:3 2652:9
owned 2485:9	2675:13 2687:2	2510:17	2667:17,22	2652:22 2662:7
2628:12	2687:24	2514:15,23	2673:5 2674:7	2664:19,21
owner 2628:20	pages 2464:9	2526:23 2560:6	2696:7,14,17	2666:19,22
ownership	2476:19	2562:6 2566:18	Partly 2623:21	2667:1 2668:18
2608:19	2518:12 2536:2	2569:7,10	party 2470:3,18	2668:23 2669:1
owning 2487:12	2538:12 2540:3	2580:14 2593:4	2575:2 2618:12	2669:4,7,9,12
owns 2488:7	2543:20	2623:11	2687:15	2669:14,15,16
o'clock 2691:1	2548:23	2642:16,25	party's 2576:10	2669:22 2670:5
P	2553:20	2647:1 2665:13	pass 2599:17	2672:6,11,17
P 2460:17 2463:2	2558:19	2682:3 2686:10	2626:15	2673:18,19,24
P 2460:17 2463:2 Pack 2566:25	2566:21	participants	2667:16	2674:16
	2569:25	2559:15	<b>passed</b> 2613:7	2676:14
package 2551:14	2601:13	2578:21	passionately	2678:15,16

2681:23 2682:9	2561:2 2584:5	2476:12,14,16	2586:6 2587:24	2614:20,21
2682:11	2584:7	2497:3 2499:22	2594:2 2620:21	2619:15 2625:6
percentage	picked 2495:21	2503:19	2621:14 2622:8	2627:7 2629:12
2664:18	2499:2,7,11	2507:23,24	2628:10	2630:18 2634:4
2673:17,21	2507:3 2513:19	2524:15	2650:15,19	2634:7,9,9,12
2681:21	<b>picking</b> 2500:23	2526:12 2541:5	<b>positive</b> 2520:14	2634:17,22
percentages	2678:3	2541:13 2553:9	2521:5,8	2635:6 2637:7
2678:16	<b>picture</b> 2544:11	2553:18	2531:15 2532:2	2641:3 2663:15
perception	2544:13,17,18	2555:25	2534:5 2537:19	2676:2 2683:4
2676:11	2569:16	2558:15	2541:14,18,19	2686:12 2689:3
perfectly 2477:4	<b>piece</b> 2557:13	2576:14,18	2542:2 2620:7	practice 2578:2
<b>perform</b> 2562:18	pieces 2597:20	2577:1 2603:2	2651:20	2578:16,24
2563:5 2658:25	<b>place</b> 2499:20	2604:17,19,24	possession	practices
2679:23	2552:5 2563:1	2605:3 2606:13	2523:21	2686:17
performance	2594:7 2613:22	2626:16 2645:2	possibility	<b>Pratt</b> 2489:9
2623:12	2626:2 2660:6	2645:21 2649:3	2547:18	2499:12
performed	2661:15	2649:19 2650:3	<b>possible</b> 2531:25	2500:23 2501:7
2666:8	<b>placed</b> 2641:7	2651:19,21	2545:3 2618:14	2502:11,25
performing	<b>plan</b> 2490:22	2652:22	2621:20 2642:7	2503:12,13,24
2628:11	2491:1	2654:14 2657:2	<b>pot</b> 2473:7,7,10	2504:5,13
<b>period</b> 2474:6	planning	2670:5	2473:13	2505:17 2506:1
2494:8,9,17	2505:22 2508:3	pointed 2467:8	2474:19 2475:9	2506:4,5
2539:15 2605:4	<b>plant</b> 2474:12,21	2535:12	2558:3,6,8	2507:2,8
2605:6,8,10,12	2474:25	2550:22	potential 2505:1	2515:19
2606:11,21,23	2568:11	<b>points</b> 2500:9	2506:7 2606:20	2522:17
2606:25 2656:4	2598:14,16,19	2507:10	2641:1 2642:10	2587:10,19,20
2658:13	2599:3 2630:11	2511:23	2660:2,9,18	2588:10 2590:3
2661:16	2630:13 2641:2	2515:20	potentially	2591:12
2677:14	<b>plants</b> 2475:13	2669:10,11	2506:6	2657:20 2693:1
periodic 2670:20	<b>play</b> 2641:8	<b>polar</b> 2687:13,17	pots 2473:13,15	2694:24,25
periods 2606:9	<b>please</b> 2466:1	<b>policy</b> 2570:23	2473:15 2558:9	<b>Pratt's</b> 2490:6
2677:3	2481:22	2602:24	2558:10,12,13	2503:8 2504:18
<b>permits</b> 2636:15	2529:20 2531:2	2637:25	<b>pounds</b> 2580:16	2506:20
permitted	2534:23 2549:8	<b>politics</b> 2614:10	power 2471:22	2507:20
2608:21	2593:22 2596:7	poor 2592:23	2478:17,18,23	2509:24
2621:16	2607:18	2641:20	2542:5,9,13	precarious
2665:13	2635:21	<b>portion</b> 2466:20	2545:5 2546:8	2628:5
person 2472:14	plenty 2593:9	2612:12	2547:20	<b>precise</b> 2634:16
personal 2474:15	plug 2463:25	<b>portions</b> 2514:14	2555:14,19	preclusive
personnel 2562:2	2511:6	2531:18	2563:21,24	2551:19
person's 2573:20	plugged 2514:8	2554:18	2564:22 2565:1	predicate
pertain 2567:3	2515:12	posed 2480:11	2565:5 2566:18	2662:13
phases 2473:2	plus 2512:15	2567:24	2567:3 2568:8	predict 2499:16
philosophy	2663:17 2683:5	position 2516:8	2568:12	2504:5,21
2666:1	podium 2481:23	2570:18,20,22	2598:14 2604:9	2505:5,21
pick 2499:20	point 2463:12	2573:22 2574:4	2604:13,16	2506:5 2510:1
2511:6 2513:17	2469:16,23	2580:12,13,13	2609:6 2614:15	2515:21 2657:9
	ı	ı	ı	<u> </u>

	1	1	1	
2678:23	2460:15	2496:13,21	2550:15	professional
predictability	press 2629:19,24	2501:5 2502:1	2577:24	2469:5
2516:19	pressure 2501:4	2502:5 2503:1	2579:23	professor
predicted	<b>presume</b> 2667:20	2508:9 2509:4	2606:23 2628:5	2570:19
2505:19	<b>pretty</b> 2485:9	2509:20 2510:9	2628:11 2661:9	professorship
predicting	2496:3 2501:17	2513:19,25	<b>problem</b> 2550:3	2570:21
2547:24 2548:1	2522:10 2532:6	2514:9,9	2554:14	<b>profit</b> 2563:9
prediction	2629:16 2661:9	2516:6,16,20	2569:18	2564:5
2515:23 2516:2	2665:25	2517:12,15	proceeding	profitability
2516:5 2656:24	prevent 2487:2	2521:23 2522:1	2607:22	2563:19 2564:6
<b>preface</b> 2572:24	previous 2474:2	2533:19 2534:3	2608:10	2564:8
<b>premise</b> 2652:18	2546:6 2621:6	2534:4,10,14	2660:14 2696:7	profitable
premised	previously	2535:13,17	proceedings	2629:23
2592:16	2524:22 2525:2	2536:4,13,20	2460:3 2696:10	program
premium 2612:5	2525:4,6	2537:1 2542:3	proceeds	2560:11
2617:11	2607:15 2672:1	2637:9 2679:15	2664:25	<b>Progress</b> 2566:24
preparation	pre-filed 2571:2	2679:16 2681:3	<b>process</b> 2469:22	prohibitive
2500:2 2576:11	2575:11,19	pricing 2501:4	2527:15	2474:24
2581:12	2594:10	primarily 2519:7	2557:18	projected
<b>prepare</b> 2570:25	2596:16	2519:9	2576:10	2491:23 2509:9
2588:2 2594:10	<b>price</b> 2484:14,15	<b>primary</b> 2533:14	2580:20,20	2530:10
2596:15	2491:15,21,24	2561:14 2648:9	2582:5	projecting
prepared 2480:1	2492:8,14	2649:1,13	procurement	2491:24 2523:2
2490:4 2491:6	2493:6 2496:3	2650:2,22	2580:9	promoted 2604:6
2513:18	2496:6 2505:1	2652:13,13	procures	promotion
2545:22	2506:7 2508:5	2666:3,4	2619:15	2594:7
2602:15	2514:11,11,20	2669:14,21,25	produced	proofread
2653:23	2514:21 2515:1	2687:21	2483:18 2637:9	2696:8
2657:25 2659:1	2515:11 2517:2	principle	producer 2519:5	<b>proposal</b> 2467:12
preparing	2519:11	2469:17	producers	2467:19,21
2490:16	2561:14 2576:3	prior 2483:15	2483:11	2609:18
present 2463:14	2576:3 2609:24	2491:5 2500:7	producing	2616:12 2617:1
2544:14,17,19	2610:1,21,22	2535:5 2546:12	2620:14 2621:8	2618:5 2619:5
2590:19	2611:25 2612:6	2554:16	product 2471:3	2648:7 2649:1
2660:23	2615:1 2616:13	2580:12,13	2560:11	2649:15 2650:4
2666:18	2616:14,19,19	2630:17	production	2650:8,10,11
presented 2545:4	2617:12 2619:6	2639:23	2541:17	2650:12,22
2545:14	2620:6 2623:13	2641:14	2619:21 2620:2	2651:6,10,15
2547:22	2627:17	2665:11 2673:2	2624:11 2628:8	2652:2,5,14
2650:25 2651:6 2659:20	2637:21 2657:2	privy 2621:3	productivity 2562:24 2564:4	2659:18
	2657:4,5	probabilities		2676:13,18
presenting 2508:11	2663:4 2683:14 2689:5	2513:9	2567:11	2681:20 2683:16
2667:24		<b>probability</b> 2512:12 2513:2	products 2484:7	
	<b>prices</b> 2484:2 2490:11,20		2484:12 2537:16	2686:20 2687:18
presents 2544:11 president 2578:5	2490:11,20	probably 2472:13	2561:12,15	
Presiding	2491.3 2493.6	2472:13	2637:9	<b>propose</b> 2618:13 2619:13
1 I colullig	4 <del>1</del> 73.1,13	∠+/J.∠1	2037.7	4017.13

proposed	2616:1,13,16	2674:10	2478:9,24	2553:7,8
2469:14	2641:25	put 2475:8	2489:25 2490:2	2554:4 2555:7
2470:13 2653:2	2643:24	2490:24	2495:10	2564:16
2654:1,3	<b>provides</b> 2488:16	2491:14 2495:6	2501:12	2567:24
2672:21 2673:1	2532:16	2497:4 2499:25	2516:24 2521:1	2568:25
2673:2	providing	2509:6,12,14	2524:6 2535:15	2570:10
proposing	2686:12	2510:8,23	2535:19	2571:15 2572:7
2615:16	provision	2515:14	2536:15,17,19	2572:9,12,13
proprietary	2604:12	2519:18	2536:21 2537:2	2572:18,20
2599:25	2665:14	2529:21,25	2539:23	2573:10,12
2602:17,19	prudency	2530:5 2532:3	2543:13 2544:7	2574:9,13
<b>protect</b> 2602:19	2660:15	2533:6 2548:14	2548:17 2549:9	2575:15,18
2685:17	prudent 2593:4	2550:6 2552:10	2553:15,16	2579:9,12
protected 2600:7	<b>PSC</b> 2462:13	2576:6 2616:6	2568:6 2574:12	2581:2,4
protecting	2609:2	2630:17,19	2574:12 2575:2	2583:11,14
2600:6	<b>public</b> 2460:2	2645:4 2671:7	2576:22 2577:8	2585:5,7,20,25
protection	2462:9,10	2673:6	2579:3 2586:5	2586:2,9
2603:8	2466:6 2468:25	<b>puts</b> 2490:10	2588:13	2587:3,5,16
<b>provide</b> 2466:19	2480:2 2481:11	<b>putting</b> 2509:18	2607:20,20	2588:23
2469:14	2529:14,17	<b>P.C</b> 2461:17	2608:23	2589:14,16,18
2506:13	2548:14	<b>p.m</b> 2691:6	2609:12 2616:4	2589:20,23,24
2507:12	2554:14	<b>P.O</b> 2461:8,18	2616:22	2590:2,6
2523:23	2564:10 2572:4	2462:10,15	2617:16 2618:2	2591:5,8
2531:10	2578:16,19,21		2621:4 2628:9	2592:16,20
2545:12 2546:3	2582:18 2588:3	Q	2631:4 2634:20	2593:2,21
2559:15 2573:6	2589:13 2595:1	<b>qualify</b> 2629:14	2649:18	2594:16 2595:2
2575:11	2597:6,16	2637:22	2659:21	2595:5,7,9,11
2584:22,23	2599:17	<b>quantify</b> 2671:13	2660:15	2595:13,14,16
2588:23	2602:18	<b>quarter</b> 2478:14	2661:10	2595:18,21,23
2602:13	2611:23	2525:21	2667:11 2672:1	2596:6,21
2612:11 2616:2	2613:13	2527:15,23	2680:4 2683:8	2597:7,11
2619:12 2624:9	2614:20 2626:2	2528:13 2542:8	questioning	2603:22 2604:2
2634:12	2626:5 2645:23	2542:13 2544:4	2544:5	2605:17,20
2637:23	2668:7 2696:5	2545:1,1	questions	2622:16,18,25
2640:15	published	2559:8,8,12	2468:25 2477:3	2623:3,7
2641:17	2590:23	2560:6 2562:7	2477:25	2630:25 2631:3
2647:10 2668:1	<b>pull</b> 2492:6	2562:16,19	2479:19	2631:7,22,25
2676:21	2493:8	2563:5 2565:14	2480:11,12	2635:4,11,14
provided 2507:8	<b>pulling</b> 2592:22	2566:16,18	2481:12,14,17	2635:16
2510:20 2561:7	purchase	2568:6 2605:8	2481:19 2482:3	2638:22 2639:3
2567:25 2568:3	2470:17 2609:6	2655:25	2517:10	2639:5,8,13
2597:21	<b>purely</b> 2630:16	quarterly	2528:12	2640:9 2642:4
2599:15 2606:9	<b>purpose</b> 2562:12	2478:12	2530:19 2535:8	2643:4 2644:1
2607:23	2566:12	2490:11 2562:9	2536:8 2538:5	2645:13,18,18
2610:10	2685:18	2566:9	2542:19,22	2646:5,6
2612:12 2613:1	purposes	<b>question</b> 2466:1	2546:20,23	2652:21 2653:8
2613:6 2614:25	2555:10,12	2468:9 2472:8	2552:19 2553:3	2653:12
	I	I	l l	

2656:11,15,17	2578:16 2581:8	2674:12 2676:1	Ravenswood	2676:16
2659:9,11,14	2582:8 2584:13	2676:6,6	2611:3,15,24	rear-view
2661:2,6	2601:4 2605:13	2677:7,9,9,11	2612:10,19	2590:12,25
2667:5,8	2606:6 2607:12	2677:13	2626:8,11	2657:22
2668:6,9,13	2607:21,23	2678:17 2681:8	2630:4 2641:11	reason 2475:22
2671:1,5,8	2609:16,18,21	2681:9,12,18	2641:13	2478:21
2675:7,12,22	2610:6,9,16,21	2681:21,25	raw 2561:13	2497:21
2678:6,9	2611:2,4,15,22	2682:21,24	reach 2463:12	2499:11
2679:6 2680:17	2612:6,13,23	2683:11,12,20	reached 2467:24	2531:12
2680:20 2684:3	2613:1 2614:13	2683:25,25	reaching 2468:13	2562:12 2616:3
2684:4 2686:5	2614:25 2615:2	2685:20,21,22	read 2465:22	2618:18,25
2687:23 2690:8	2615:3,3,16,19	2686:2,13	2486:24 2487:4	2629:14
quick 2599:11	2616:6,12	2687:18 2688:3	2487:18	2687:20
quite 2469:19	2617:2,11,25	2688:4,21	2489:13,19,23	2688:25
2481:24 2576:5	2618:5 2626:25	2689:2,8,17	2489:25 2504:1	reasonable
2606:7 2627:1	2627:23 2628:1	ratepayers	2504:17 2505:2	2625:19
2690:18	2628:2 2630:18	2604:18	2505:4 2522:11	2638:14 2656:7
quote 2672:2	2635:25	2606:10	2533:21	2683:25 2684:8
	2636:16 2637:7	2617:25	2535:19 2537:8	2685:21,23
R	2637:22,25	2654:15,16	2537:10 2541:4	reasonably
<b>R</b> 2463:2	2638:10,16	2676:14	2541:11,11	2636:19
raise 2501:4	2639:5 2640:6	2682:24	2545:15	reasons 2468:19
raised 2543:14	2640:13,14,17	2683:12,17	2559:16 2636:6	2666:4 2680:2
2660:14	2640:18 2641:3	2684:1 2685:17	2636:10 2648:6	2680:6
ran 2508:5	2641:8,11,13	2686:14	2679:18	rebase 2681:7
2511:20 2512:1	2641:22,24,25	rates 2542:5,9,13	2686:18	rebased 2682:8
2512:24 2516:4	2642:18 2644:2	2561:10	reading 2668:15	rebasing 2682:1
range 2507:4	2644:24	2583:25 2584:8	ready 2476:8	rebuild 2473:14
2557:20	2645:14	2606:8 2609:23	2587:10	2473:15
2663:10	2646:23 2647:1	2610:2,20	real 2492:4	2557:19
ranges 2495:5	2647:6 2648:7	2611:24	2508:5 2599:11	rebuilt 2473:8
2558:7	2648:7,11	2624:16,23	2677:17	<b>rebuttal</b> 2503:20
rate 2463:5	2650:14	2625:19	reality 2473:10	2503:24
2468:21	2653:18 2654:1	2627:25 2629:4	2592:25	2643:20
2469:14 2474:2	2654:15,20,21	2635:6 2636:3	2675:18	2644:15
2474:9,10,14	2655:19 2656:5	2636:5 2637:6	realized 2470:15	2694:11,19,21
2475:2 2545:9	2659:19	2647:20	really 2469:19	2694:25
2545:12 2546:8	2660:10	2652:11 2658:3	2478:6,15,17	recalculation
2547:20 2548:1	2661:11,12,12	2665:24	2483:8 2485:2	2644:22
2548:3,6	2661:21	2666:18	2496:13 2522:9	2694:15
2551:9,12	2662:15 2663:3	2671:24 2674:6	2592:25	recall 2484:25
2552:8 2563:17	2663:4 2664:21	2678:14 2681:7	2602:20	2485:1 2511:15
2563:18 2564:1	2665:5,5,8,9,11	2681:15 2682:4	2608:23	2520:11,22
2564:8 2566:18	2665:22,23	2682:8,13	2625:25 2626:3	2553:10 2601:4
2567:3,5,13	2666:16,17,21	2683:7,7	2626:25 2645:1	2607:7 2613:23
2568:8,12	2666:22,24	2686:13	2658:18	2616:8 2618:15
2576:7 2577:24	2672:8 2673:20	2688:23 2689:6	2663:13	2646:10,17,21
			<u> </u>	

2647:4,7	2480:21	2663:24 2664:2	2568:22	2547:20 2548:1
2670:15	2524:20	2664:3 2683:6	2628:22	2548:3,6
2675:23 2685:7	2525:18 2541:5	reductions	regarding	2564:1,8
2686:7 2687:7	2548:14	2620:7	2550:17 2551:8	2567:13 2576:7
2688:3	2570:12 2571:7	reference	2552:8 2581:7	2576:15 2582:9
receipt 2466:16	2574:1 2580:2	2592:21	2635:16	2613:20,23
2481:6 2526:16	2587:18 2592:2	2627:11	2642:10	2639:5 2640:15
2527:10 2528:5	2593:23 2596:8	<b>referred</b> 2614:15	2646:12 2687:3	2641:25
2572:1 2589:8	2599:12	referring	regular 2465:3	rely 2490:14
2590:19	2643:11 2645:5	2506:24	2478:12 2519:3	2689:20
2594:23 2597:3	recross 2477:24	2507:16	2539:3	remain 2620:20
2603:14	2552:21	2514:16	regulatory	2621:13
2611:20	2569:19	2517:23 2537:6	2460:15	remainder
2644:20	2572:21 2591:7	2631:8	2607:24	2640:22
<b>receive</b> 2617:3	2595:24 2668:6	refinance	2614:18	remained 2622:6
2674:11	2668:8 2671:4	2472:10	2626:20	remember
received 2479:3	2692:13	2477:21	2627:16,21	2483:10,12
2481:7 2526:20	2693:14,15,16	refinancing	related 2511:5	2504:16 2505:7
2527:13 2528:9	2694:1,2,3,4	2472:2	2564:17	2505:11
2528:22 2572:2	red 2478:20	reflect 2509:13	2608:16	2507:25
2589:9 2594:24	2496:5,7	2535:17	2619:25 2620:6	2520:24 2544:5
2597:4 2603:15	redirect 2463:8	2536:13,19,25	2625:17	2547:15 2550:7
2611:21	2463:11 2478:2	2662:16	2696:13	2639:12 2642:4
2641:11 2647:5	2555:3,6	reflected 2523:7	<b>relating</b> 2635:24	2665:2 2685:12
2690:17	2570:3 2572:21	2530:19	relations 2561:23	2685:13
receives 2618:1	2579:11 2587:4	2618:18	relationship	remind 2578:15
receiving	2591:9 2595:24	2644:24	2608:18	remove 2467:2
2608:12	2631:21	2651:13	2642:11	<b>removed</b> 2687:16
2638:16	2638:24 2639:2	2658:22 2682:3	<b>relative</b> 2561:13	renegotiate
receptive 2506:7	2680:18,19	2685:15	2629:21	2621:22
2511:20,22	2692:4,14	reflects 2664:1	2696:15	renewed 2626:14
recess 2475:25	2693:17 2694:5	refresh 2505:20	release 2603:7	repair 2558:6
2476:6 2549:6	reduce 2620:5	2597:14	released 2600:2	repairing
2579:6 2643:9	2621:1,16,18	<b>refund</b> 2660:19	2602:25 2603:3	2474:19
recognize	2621:25	refurbish	2603:6	<b>repeat</b> 2466:1
2485:23	2622:13	2557:21 2558:6	releasing	repeatedly
2600:24	reduced 2471:23	refuse 2610:7	2602:24	2603:3
recollect 2468:7	2473:3,4	regard 2465:17	relevance 2640:1	repetition
recollection	2551:2 2553:9	2471:10 2472:2	2640:4 2649:23	2541:14
2646:24	2610:15	2480:7,8,16	<b>relevant</b> 2637:10	rephrase 2524:6
recommend	2670:21	2559:16	2649:6	replace 2558:6
2661:11	2674:25 2686:2	2560:21 2561:8	reliable 2658:15	replacing
recommendation	reducing	2562:18 2563:4	relied 2490:5	2474:19
2661:15	2620:20	2563:21,23,24	2500:23	report 2522:23
recommendati	2621:13	2564:4,12	2513:10	2522:25 2523:8
2681:5	reduction 2567:6	2565:20	relief 2475:2	2523:8 2577:21
record 2466:20	2568:8,12	2566:17 2568:1	2545:6,9,12	2593:12 2647:9
	l	l	l	l

2647:11	2675:1,15	retail 2469:13	2618:4,8	2645:16,23
<b>reported</b> 2460:23	2688:12	2608:12	2619:4	2647:8 2650:1
2477:10	requirements	2619:14	revolver 2555:9	2656:12,20
reporter 2535:1	2550:18	2634:15	<b>RICK</b> 2462:23	2657:18,22
2696:1,4	requires 2473:20	2642:12 2658:3	rider 2585:9,17	2658:12 2659:4
REPORTER'S	research 2570:24	retain 2561:19	ridiculous	2663:12 2664:5
2464:8 2476:18	researchers	2562:1 2665:13	2669:10	2664:16 2666:7
2518:11	2519:20	retaining	<b>right</b> 2463:17	2667:3 2668:5
2538:11 2540:2	reside 2642:23	2684:16	2471:12 2476:7	2669:7 2670:6
2543:19	residential	retains 2682:13	2477:15	2670:17,22,23
2548:22	2549:21	retention 2663:3	2486:17,21	2671:23
2553:19 2556:4	2668:22	retractive	2490:21 2494:1	2672:16,18
2558:18	residentials	2660:19	2494:8,11,13	2673:10,22,23
2569:24	2584:15,17	retroactive	2494:17,21	2674:3,14
2601:12 2632:3	resources 2492:2	2660:10	2495:19	2675:4 2678:19
reports 2562:10	2492:22	return 2472:21	2496:14,22	2678:25
2566:9 2629:19	respect 2465:8	2541:16	2497:1 2500:4	2679:13,17
representative	2484:1 2520:13	2666:16,17	2500:9 2504:10	2680:9 2685:19
2495:22 2505:1	2535:15 2562:3	revenue 2550:18	2505:2,12,21	2688:5
2508:2 2511:14	2579:18 2635:3	2551:9 2581:8	2506:2 2507:1	risk 2469:16,19
2511:19	2689:22	2638:9,13,13	2509:24,25	2469:25
2512:23 2573:3	respects 2576:5	2646:12	2512:16 2513:1	2470:16,18
2577:15 2578:1	respond 2575:23	2647:19,24	2519:18	2487:9 2488:9
2687:12,20	2618:13 2645:8	2663:21 2672:8	2525:15 2529:3	2490:21 2491:1
represented	2645:9	2673:12,15,16	2529:5 2531:9	2544:24
2545:4 2644:24	response 2465:13	2673:21 2675:1	2541:8,13	2545:17 2546:2
represents	2602:22	2675:15 2682:4	2542:9 2543:2	2546:5 2548:4
2515:22 2601:5	2620:11	2688:11	2543:5,7	2562:14
request 2493:15	2666:14 2672:1	revenues	2549:18 2551:4	2565:25 2569:3
2572:24,24	2680:10	2460:10	2551:5 2552:3	2642:17,20,22
2609:3 2611:15	responses 2621:7	2612:25	2555:2 2558:16	2642:23,25
2621:6 2641:23	responsible	2638:10	2560:17 2561:2	2660:4,5,5,7
2659:1 2670:15	2580:10,14,15	2663:24 2664:3	2563:1 2569:12	2667:19 2668:2
2688:18	responsive	2664:11	2572:19	2675:24,24
requested	2478:1	2665:13	2574:15,19	2676:5,12,14
2607:22	rest 2493:12	2677:23	2575:2 2579:15	2686:6,11
requesting	restart 2641:24	review 2560:10	2579:18 2583:7	risks 2560:1,5,20
2545:13	2642:1	2560:19	2583:9,12	2561:6 2566:13
requests 2620:12	restarting	2625:23,25	2591:11,22	2660:3,19,20
required 2555:16	2474:23	2626:3,13	2595:12 2601:9	2667:12,13
2610:19 2612:5	restate 2468:10	2677:10	2602:2,21	2675:23
2612:9,19	result 2513:18	reviewed 2523:8	2611:9 2612:1	<b>Rivers</b> 2608:17
2636:17	2641:19 2645:6	Reviewing	2615:20 2629:8	2608:18,20
requirement	2652:15 2675:1	2527:24	2632:1 2638:23	2609:4
2647:24	results 2527:16	2534:24	2640:5,11	rmitten@bryd
2660:11	2560:3 2566:15	2535:10	2643:10	2461:19
2673:12,16	resume 2691:2	revised 2590:24	2644:13,14	ROBERT
			l	l

	1	1	1	1
2460:16	2676:7 2692:11	2491:3,8,14	2485:13 2603:4	2678:15
<b>robust</b> 2491:6	2693:13,25	2494:19,20	second 2563:11	2679:19
2498:11	RUSSELL	2495:2 2498:20	2564:25 2567:4	2683:12 2685:2
<b>rod</b> 2465:8,12,16	2461:16	2498:21,22	2581:17	seek 2613:13,19
2465:19 2466:8		2499:14	2590:16	2613:22
2470:19 2471:3	S	2500:24 2506:8	2591:25	<b>seeking</b> 2471:13
2471:11,14,20	<b>S</b> 2460:16 2463:2	2507:13,15	2600:17 2603:2	seen 2529:1
2539:15 2569:5	2577:5	2508:4,19	2620:14	2575:22 2603:3
role 2639:18,20	safely 2475:13	2511:14,15,19	2635:23	2603:5
rolled 2561:15	<b>safety</b> 2475:5	2511:20 2512:1	2669:25	segment 2563:9
<b>Ronald</b> 2587:19	sale 2630:17	2512:8,10,23	2670:11	2564:5
room 2539:7	sales 2634:14	2513:4,13,14	2690:19	segments 2484:8
2544:14,19	2664:12,20,25	2514:5 2515:11	secret 2602:20	select 2513:24
2568:21	samples 2507:4	2516:10 2534:8	Secretary	<b>selected</b> 2504:25
2654:10	SAM'S 2462:23	2534:9 2535:16	2586:12,25	self 2596:11,14
rose 2531:8	Sante 2462:24	2536:8,12,25	<b>section</b> 2475:18	2627:16
rosier 2544:13	2627:19,21	2545:23	2570:3 2602:3	2640:24
roughly 2471:13	<b>SAS</b> 2661:12	schedule 2517:24	2636:13 2637:2	self-governing
2651:25	save 2584:19	2574:24 2598:4	2637:20 2638:7	2627:20
round 2674:15	savings 2564:22	2643:24	sectors 2531:17	self-owned
routinely 2469:5	2565:1,5	2648:14 2662:4	2531:19	2598:13
row 2577:24	2568:2 2663:17	2662:6,21	Securities 2466:7	<b>selling</b> 2664:8
<b>RPR</b> 2460:23	2683:5	2665:10	2485:25 2487:6	sells 2614:20
2696:22	saw 2504:4,6	2668:14	security 2584:23	2634:9
rules 2488:1	2505:6 2660:5	schedules	see 2472:12,15	send 2472:18
ruling 2467:14	<b>saying</b> 2486:11	2643:21 2644:5	2476:10 2482:6	senior 2519:25
2572:25	2501:7 2512:19	2647:16 2648:2	2482:7 2485:23	sense 2689:1
2643:19	2523:25 2582:5	schemes 2635:17	2487:13	sensitivity
2645:17	2606:16	scholar 2492:16	2493:19 2495:8	2508:18 2511:2
run 2473:12	says 2505:17	Schwartz	2497:5 2510:24	<b>sentence</b> 2487:16
2475:13 2479:4	2524:10	2591:14,16,19	2515:12 2521:2	2509:16
2491:19,22	2532:14	2592:4,9,18	2525:17 2533:8	2623:11
2492:7,10	2533:12	2593:1,5	2533:15 2535:6	separate 2551:20
2508:24 2509:1	2562:24	scope 2477:24	2536:15 2549:4	separately
2512:6 2513:1	2607:21 2609:8	2684:3	2551:19	2647:3
2513:6 2514:2	2609:9 2636:15	SCOTT 2460:18	2566:25 2567:4	sequence 2506:9
2514:7 2516:15	2688:13	scrap 2630:14,16	2571:1 2584:8	serve 2666:9
2517:3 2563:17	<b>scenario</b> 2495:16	2630:20	2593:5 2602:4	2689:16
2563:18	2495:20 2496:1	2640:10	2622:22,23	served 2598:13
running 2473:12	2497:1 2505:22	scrapped	2627:18	2627:19 2629:2
2474:12	2508:3,20	2630:13	2636:21	2629:3,4
runs 2649:9	2511:1 2512:5	screen 2467:3	2637:13	2663:14,22
Rupp 2460:18	2512:5,19	scripts 2546:12	2638:17	2683:13
2591:6 2595:20	2514:2,6	Sebree 2608:9,16	2645:13 2647:9	serves 2520:15
2595:21 2631:1	scenarios	2639:10	2657:22	service 2460:2,11
2631:3 2667:6	2484:15 2490:4	SEC 2465:10	2665:10	2468:25 2480:2
2667:8 2675:23	2490:18,19,23	2477:10	2666:16	2497:23,24
2007.0 2073.23	,,	Δ¬77.10	2000.10	2771.23,2 <del>1</del>

		_		_
2552:9 2564:10	2493:15,16	side 2534:13,14	2604:11,14	2668:25
2581:8 2588:3	2494:21 2496:2	2625:22	2611:16 2613:5	2669:14
2597:16 2599:4	2506:16 2530:9	sign 2485:13	2614:2,7,23	smart 2516:8
2599:4 2608:12	2531:8 2532:6	2581:15	2622:23	smelter 2539:5,6
2608:13	2585:1 2606:2	2646:19	2623:15	2541:17 2545:3
2611:23	2606:13	signators	2624:17 2634:5	2546:9,14
2612:25 2629:5	severe 2475:14	2582:19	2635:22 2643:6	2547:18 2548:7
2648:9 2649:1	Sewer 2670:9	signatory	2643:14	2565:2 2568:11
2654:23	share 2541:20,24	2551:17	2653:15	2569:4 2598:9
2662:25	2545:24	signature 2486:9	2661:19	2598:10,11,13
2665:22,23	2674:17	2586:14	sit 2515:20	2598:16
2666:4,20	shareholder	<b>signed</b> 2486:11	2516:1 2522:6	2607:12 2608:8
2668:25 2669:3	2487:3,24	2586:15,19	situation 2568:15	2608:11
2669:14,19,21	shareholders	2646:11	2568:18 2640:1	2609:17,22,23
2669:25 2672:4	2477:14 2487:2	significant	six 2462:24	2610:2,6,14,20
2672:5 2678:14	<b>short</b> 2476:2	2501:7,13,24	2484:21	2611:3,25
2688:3,4,7,8,9	2521:2 2586:23	2623:19 2624:5	2494:15,16	2612:5,10,13
2688:12 2696:5	shortfall 2638:10	significantly	2496:2 2497:6	2612:20,24
<b>services</b> 2460:24	2638:13	2487:17	2506:16 2532:2	2613:1,10,15
2580:10	Shorthand	2501:17,20	2676:25	2613:20 2615:7
<b>serving</b> 2660:16	2696:3	<b>Silicon</b> 2594:1	sixth 2577:24	2615:11,16
session 2464:8	show 2493:15	similar 2527:15	six-tenths	2616:14 2617:7
2465:3 2476:18	2497:4,7	2562:5 2565:19	2584:19	2617:21 2618:1
2518:11 2519:3	2505:16 2507:4	2566:6,20	<b>size</b> 2470:17	2619:22
2538:11 2539:3	2526:24 2534:9	2576:5 2614:19	2689:9	2620:15,20
2540:2 2543:19	2618:19	2637:16 2638:3	slide 2527:3,22	2621:9,13
2548:22 2549:3	2661:17	2638:20	2529:20	2622:6 2623:13
2553:19 2556:4	<b>showed</b> 2493:16	<b>simple</b> 2680:4	2530:13,15	2623:20 2624:3
2558:18 2559:5	2506:9 2527:4	<b>simply</b> 2493:2	2533:9,12	2624:4,6,7,16
2569:24	<b>showing</b> 2569:16	2532:13 2574:4	2541:8,9	2626:8,12
2601:12	shown 2514:7	2658:24	2562:23,24	2627:24,24
2627:12 2632:3	2662:20	<b>single</b> 2471:6	2567:8 2685:5	2628:11,12,19
set 2503:16	shows 2661:20	2514:2,6	2685:9	2629:12,22
2606:8 2616:10	shut 2474:25	2629:15	slides 2526:23	2630:3,8
2624:15 2635:2	2475:3 2555:18	sir 2468:12	2527:3,18,22	2631:10,14,16
2636:5 2638:1	2629:12,15	2477:15 2482:6	2530:19,22	2640:8,15
2640:6 2662:13	2630:9,10	2486:16	2544:3 2559:7	2641:2,24
2665:24 2685:6	2641:21,22	2505:25	2559:14,16,22	2648:19
2688:23	2648:19	2525:10 2533:5	2560:20 2562:8	2663:22 2686:1
setting 2535:23	2682:25	2535:21 2537:7	2565:13,22	smelters 2580:17
2637:6	shutdown 2475:6	2544:6 2561:4	2566:7,16	2597:22,25
settled 2549:12	shutting 2475:11	2564:14	2567:9 2685:6	2601:3 2604:13
2549:13	2548:9 2629:20	2581:10,18	slight 2594:4	2608:9,16,21
2642:23	2630:18	2582:1 2583:4	Slightly 2585:12	2614:14
settlement	2649:14,20	2585:18,22	slow 2535:25	2615:19
2468:22,23	2650:4,23	2586:19 2587:1	slowed 2539:14	2623:25
seven 2477:12	2652:15 2684:1	2587:6 2600:25	small 2592:14	2624:11 2627:5
	1	1	•	1

2628:7,14,20	2494:22 2502:4	2618:5 2625:16	<b>St</b> 2460:25	2593:22 2596:7
2629:10,15	2506:5 2507:16	2625:24 2626:1	2461:5,14,22	2602:23
2634:13,14	2514:10,24	2626:25	2462:20	2607:11
2639:6,11,21	2516:23	2627:25	stable 2521:22	2619:20
smelter's	2523:10 2524:3	2635:25	2534:5 2537:15	2624:14,25,25
2609:18	2529:9 2530:11	2636:16	staff 2462:13	stated 2468:4
2610:11 2611:4	2532:25	2637:22,24	2481:18	2478:15
2611:15	2535:22,25	2638:10,16	2492:21	2502:16 2688:1
2619:25	2536:23 2537:7	2639:5 2640:6	2552:22 2572:8	statement 2478:1
smiles 2549:4	2543:7 2559:2	2640:12,14,17	2589:19 2595:8	2486:22 2487:6
<b>Smith</b> 2461:7	2560:15 2584:4	2640:18 2641:7	2603:24 2626:8	2487:20
2463:7,9	2588:10	2641:11,13,22	2653:9 2672:21	2504:16
2465:4 2466:6	2616:20	2641:24	2673:1,2,3	2508:15 2522:7
2467:19 2470:2	2628:25	2684:22 2689:8	2675:8 2686:19	2524:3,14
2478:24 2479:6	2650:11 2669:8	specialized	2687:15	2537:24 2544:3
2526:1,5,8	2669:16	2473:16	<b>staffing</b> 2621:17	2565:19 2573:1
2528:12 2533:1	2671:20	specific 2514:18	<b>Staff's</b> 2649:12	2577:2,4
2533:12,23	2682:11	2543:15	stand 2463:7	2629:16,17
2535:12 2536:3	sort 2468:12	2606:23	2643:12 2645:4	2685:2
2564:21,25	2493:21	2617:16	2677:3	statements
2568:21	2498:14	2627:12	starkly 2544:12	2545:11
2613:16,18,25	2512:14 2513:2	specifically	start 2475:11	2548:13
2614:4 2618:7	2541:12	2577:3 2613:9	2478:13	2559:18,23,25
2618:11,15	sought 2471:10	2635:17 2636:2	2480:17,18,21	2560:4,14,16
2692:3	sounds 2526:8	2667:17	2493:13 2495:3	2560:22 2561:8
<b>Smith's</b> 2535:6	2647:8 2671:6	specifics 2471:19	2509:8 2524:19	2564:20
2614:9 2619:4	2673:10 2674:3	<b>spend</b> 2557:4	2529:18	2565:20
smooth 2504:14	source 2495:18	spending	2536:22	2567:23
sold 2630:13,21	2523:24 2524:5	2539:10,15	2537:22	states 2485:25
2640:10	2524:8,8,14	<b>spent</b> 2469:15	2559:11	2533:15 2562:1
2663:16	2599:25 2600:7	2580:17	2618:19 2661:9	2580:11 2606:8
2664:10 2683:5	2602:9	<b>Spinner</b> 2573:5	<b>started</b> 2463:20	2607:24
2689:4,4	<b>South</b> 2461:8	2573:12,17	2469:7 2471:17	2615:20,25
<b>solely</b> 2636:3	speak 2470:7	2574:6,10,18	2471:19 2476:8	2624:18 2625:1
somebody	2577:6	2576:24 2577:5	2491:13 2496:9	2626:22
2492:17	speaking	2578:4 2580:4	2502:2 2549:10	2627:13
2524:10 2526:6	2526:23	2583:15	2575:8,10	2635:17,24
2527:17	special 2477:14	2692:19	2582:7 2639:15	static 2620:20
2531:20,23	2477:20 2478:7	Spinner's	starting 2499:4	2621:13 2622:7
2603:10	2541:21	2578:20	2499:21 2500:9	statistical
somewhat	2607:12	spoke 2525:24	2511:23	2491:19,22
2624:3 2629:18	2609:16,18,21	2526:2	2535:16	2492:7,10
2681:17	2611:2,4,15,22	spontaneously	state 2460:1	2497:23
sorry 2465:25	2612:13,23	2473:14	2468:4 2479:20	2512:18 2513:6
2467:13	2614:13	spot 2590:13,20	2570:11	statistician
2486:18	2615:16,19	2657:21	2586:12,25	2493:18
2490:25	2616:6,12	<b>spread</b> 2532:17	2587:17	statistics 2492:17
	1	1	1	1

2512:15	2576:16,17	study 2499:2	2641:17	2514:15,17,25
2590:22	2581:6,16,22	<b>studying</b> 2580:17	sufficiently	2517:5 2520:21
status 2628:3	2583:1 2585:14	stuff 2509:23	2505:1 2506:7	2522:5 2523:7
<b>statute</b> 2634:21	2643:22,23	2550:7	suggest 2513:2	2537:8 2550:3
2635:24	2644:25 2645:1	<b>subject</b> 2622:2	2532:20	2571:1 2580:4
2636:23	2646:12,18,19	2635:6 2673:7	suggested 2675:4	2580:21
2637:15 2638:2	2646:21	2676:22	suggesting	2581:25
2638:19	2653:19 2654:4	2677:10	2488:5 2674:8	2586:16
<b>statutes</b> 2660:12	2659:5 2672:14	submit 2592:20	2689:1	2621:20 2627:1
statutory	2673:25	submitted	suggestion	2634:16 2640:3
2624:21	2676:20 2682:2	2493:14	2467:24	2643:2 2652:9
2625:10,14	2684:12	2620:12	2520:11	2652:17
2626:11	stock 2485:10	subscription	suite 2461:8,13	2657:18
2635:17	2487:13 2488:1	2602:11,18	2461:21 2462:4	2668:15
stay 2627:12	stop 2545:25	subsequent	2462:11,24	<b>surge</b> 2473:7
step 2479:7	2691:1	2660:14	2503:6	<b>surgery</b> 2466:3
2531:1 2545:7	stoppages	2681:16	summarize	surplus 2523:2
2563:7,14,15	2561:24	subsequently	2680:25	surprise 2586:20
2563:24 2570:4	STORES	2472:21	summarizes	2586:22
2572:21 2587:6	2462:23	2662:12	2533:13	surrebuttal
2591:12	storm 2473:9	subsidies 2610:6	sums 2666:2	2480:3,8
2595:25 2643:6	<b>stormed</b> 2470:8	2610:10	supplemental	2489:19
2690:22	<b>Street</b> 2460:24	2612:12,16	2653:18	2499:10
steps 2474:13	2461:8 2462:4	2613:1,6	supplements	2503:24 2504:1
2563:20	2462:11,16,24	2617:2 2618:1	2554:8	2504:4,24
2620:25	2489:6 2526:25	<b>subsidy</b> 2574:5	supplier 2468:20	2505:4,15,17
2622:12	2527:17	2610:16 2662:1	2634:7	2507:3,6
<b>Steve</b> 2573:5	2528:13	2662:19	supplies 2583:21	2514:8 2517:20
<b>Steven</b> 2580:4	2529:21 2696:6	2671:13,22	<b>supply</b> 2534:14	2517:22 2571:1
2692:19	stress 2508:14,24	substantial	2537:18	2588:4,19,25
stick 2495:24	strike 2624:18	2547:19	<b>support</b> 2530:2	2616:17,18
2502:8 2536:18	strikes 2561:23	2561:19,22	2576:7,13,15	2618:5,12
sticks 2483:13	<b>strong</b> 2532:16	2573:25	2607:11	2623:10
stip 2550:14	2533:18,24	2590:13 2660:2	2609:17 2611:3	2643:20
2585:10	2629:16,17	substantially	2613:13	2694:12,17,23
2681:20	struck 2552:4	2471:2 2486:25	2636:19	<b>suspect</b> 2679:8
stipulated 2650:9	structure	substitute	2640:18 2642:1	<b>sustain</b> 2628:10
2683:25	2469:14,17,20	2466:25	2665:21	sustainability
2685:20	2470:1,13,14	substituted	supported	2474:13
stipulation	2470:17 2563:7	2485:22	2576:1 2642:18	2533:19 2534:3
2549:24	2567:11 2606:7	substitution	2682:21	sustainable
2550:17 2551:7	2634:17 2636:3	2467:15	<b>sure</b> 2466:2	2478:23
2552:1,7,14	2660:3,7	success 2620:8	2470:21 2492:5	2534:10 2535:7
2573:7,8,22,22	2676:4	2623:12	2495:17	2535:13,17
2574:14 2575:9	structures	suddenly 2600:3	2502:14	2536:4,13,19
2575:15,25	2469:13	sufficient 2471:7	2505:13	2536:25 2537:5
2576:1,2,4,13	2580:18	2640:15	2507:24	2546:8
	I	l	I	l

		_		
SUZANNE	2678:17,22	2506:22	2560:17,20	2471:9 2484:13
2460:23 2696:3	2679:22	2510:25 2511:1	2562:7 2571:7	2495:15
2696:22	taken 2476:6	2514:22,23	2602:16	2500:23
swear 2579:4	2517:1 2549:6	2517:11 2523:1	2611:12	2551:21 2554:9
Sweargen	2578:22	2529:8,21	2620:25	2567:16 2576:4
2461:17	2620:25	2533:23 2534:4	2622:12 2630:3	2630:2,4
switching	2622:12 2643:9	2535:6 2536:3	2630:4 2639:15	2682:1
2521:17	2643:12	2536:5 2542:1	2652:7 2653:16	test 2508:24
sworn 2479:12	2650:19	2560:15	2673:15 2679:6	2663:7 2687:14
2479:14 2570:8	2660:21 2679:2	2581:19 2583:3	2679:7	testified 2575:14
2580:1 2587:12	2696:11,15	2641:23	telling 2488:8	2597:15,18
2593:18 2596:4	takes 2531:20	2650:10,11	2529:13,17	2607:6,11,15
system 2473:24	2599:4	2655:17 2662:1	2530:8 2531:7	2608:7 2613:16
2584:2,5,23,23	take-a-ways	2673:20	2545:20,21	2687:5
2584:25	2541:12	talks 2534:2,12	2547:1,2,3,9	testifies 2579:6
2598:15	talk 2467:11,18	target 2610:22	2548:2,2	testify 2502:25
2604:20,21	2470:19	tariff 2460:10	2559:20	2573:3 2575:21
2654:17,18	2472:16	2610:21 2612:6	2563:23	2577:16
2656:19,19	2487:11	2617:11	tells 2563:3	2578:16
2657:11,12	2488:12	2627:25 2629:4	temporarily	2579:19
2658:3,11	2490:23	tariffs 2634:15	2465:12	2609:10,17
2664:24	2493:10	2634:18	temporary	2611:3 2643:13
2678:24,24	2496:11	<b>TATRO</b> 2461:3	2628:16	testimonies
2681:24	2500:24 2510:3	2466:17 2468:2	tender 2481:8	2480:12,16
2683:18	2510:5 2520:10	2477:23	2571:23	2644:23
	2526:6 2527:19	2549:16,25	2589:11	testimony 2474:2
T	2537:21 2539:4	2550:5,10,12	2594:20	2480:3,7,8
<b>T</b> 2460:18	2543:1,10,15	2550:14,20,25	2596:25	2489:14,20
table 2470:9	2544:25 2546:7	2551:5 2552:13	tends 2623:24	2490:6 2496:4
2631:8	2547:16,17	tax 2612:25	term 2472:11	2497:11 2498:2
tables 2470:4	2548:5,6	tbyrne@amere	2501:15	2498:22
tact 2548:11	2555:8 2557:2	2461:6	2502:17	2499:12 2500:1
take 2469:24	2565:13 2575:7	team 2519:20	2511:13,18,25	2500:4,6,11,16
2471:2 2476:2	2575:8 2593:1	2580:15	2512:9 2515:18	2500:22,25
2511:3 2515:13	2593:4 2598:4	teams 2469:7	2517:14,15,17	2501:6,12
2516:20 2526:7	2599:10	Teasdale	2517:19 2520:9	2502:6 2503:14
2526:9 2527:2	2615:22	2461:21	2522:17	2503:17,21
2531:23 2554:3	talked 2495:12	technically	2533:20 2534:4	2505:12 2507:9
2554:10	2500:20 2502:3	2627:6	2534:11	2507:17,22
2557:17	2503:5 2505:5	technology	2535:14,18	2511:15
2578:20 2579:6	2527:5 2528:23	2558:13	2536:14,20	2517:21,22
2597:18	2546:9 2547:17	television 2467:2	2537:1 2561:20	2545:5,10
2611:12	2548:5 2563:7	tell 2469:2	2609:5 2618:8	2571:2,4,15,19
2634:22 2635:6	talking 2478:16	2472:14	2629:23	2571:22 2573:6
2637:7 2643:7	2501:25 2502:5	2502:25 2522:6	2636:19 2679:4	2573:21
2645:3 2670:11	2504:21	2530:24	terminate 2609:3	2575:10,12,19
2675:14	2506:14,17,20	2544:22	terms 2466:10	2577:22

2578:20,21	2467:16 2476:5	2474:23 2475:3	2665:3,9,12	thought 2507:3	
2586:5,10,17	2476:13 2479:5	2482:25	2666:2,14	2508:1 2517:7	
2588:4,4,16,19	2479:8,8,16	2483:19	2677:1,14,19	2530:4 2590:14	
2588:25 2589:3	2481:19 2506:3	2484:15 2500:9	2679:18	2644:3 2660:17	
2590:10	2518:8 2542:16	2504:8 2510:13	2680:11,12,24	2671:18	
2592:19 2594:4	2546:16	2529:17	2681:12	2687:12,18	
2594:6,11,16	2550:25	2535:23 2544:9	2682:18 2684:7	three 2484:22	
2596:16,21	2552:24 2555:4	2546:11	2685:22	2496:14	
2597:21 2598:5	2569:20 2570:5	2547:21	2686:15 2687:2	2498:21 2499:2	
2599:15	2572:5,9,16,22	2555:11 2583:8	2687:21	2499:11	
2607:19 2608:1	2585:2 2587:6	2622:6	2688:20	2504:25 2506:9	
2608:15,24	2587:7,14	think 2467:14	2689:13	2508:1,4	
2609:2,14	2589:10,20	2478:4,5,19,21	2690:11	2511:17	
2610:25	2590:3 2591:13	2493:18	thinking 2474:20	2512:22	
2613:23	2593:16 2595:2	2498:18	third 2471:13	2513:13 2532:6	
2614:13	2595:19 2596:1	2500:12	2488:7 2527:15	2557:22,23	
2615:15	2603:25	2501:20,22	2527:22	2558:1 2590:21	
2616:11,23	2605:16	2511:13	2528:13 2542:8	2650:24 2651:4	
2617:8 2618:5	2609:11	2525:14,16	2545:24 2559:8	2658:20,21	
2618:10,13,16	2622:17 2623:3	2526:3,5	2559:11 2560:6	2689:18	
2618:24 2619:5	2628:23	2533:3 2539:23	2562:6,16	throated 2665:21	
2619:19	2631:20	2543:13	2566:16 2621:7	throw 2499:17	
2624:10,13	2635:10	2544:16,21	<b>Thomas</b> 2593:24	thrust 2625:25	
2627:11 2629:7	2638:22 2643:6	2545:16 2546:6	2693:5	thumbs 2476:10	
2631:6 2639:16	2645:25 2646:2	2546:25	Thompson	tied 2610:9	
2643:22	2653:8,10	2547:19 2548:4	2462:14	2614:25 2619:5	
2647:15 2651:7	2656:10	2548:8 2551:20	2481:19	tight 2501:1	
2652:5 2653:2	2660:25 2661:3	2551:22	2550:11	2502:12,20	
2659:20 2662:8	2667:5 2668:4	2552:15 2554:4	2552:24 2553:3	2522:18	
2662:14,17	2669:13 2671:1	2565:7 2568:13	2553:12 2572:9	tighter 2522:18	
2663:2 2666:1	2672:9 2675:7	2573:7 2578:9	2578:12,14	2522:19	
2666:15,17	2675:9 2677:2	2579:1,3	2589:20 2595:9	tightness	
2670:14	2678:6 2688:16	2583:11	2603:25 2604:2	2523:25	
2679:18 2680:3	2690:6,20,21	2591:23 2593:4	2605:17 2634:2	2524:11	
2681:1 2682:21	2690:24	2599:6 2605:3	2635:11 2642:2	time 2469:4,10	
2682:23	thanks 2546:15	2605:22	2653:10,12	2469:15 2473:1	
2686:19	2552:16 2594:9	2606:23 2607:3	2675:9,10	2473:9 2474:6	
2687:24	2622:25	2608:22	2681:12 2686:6	2479:9 2485:13	
2694:10,11,12	2630:23	2621:10 2628:6	2692:12	2485:14 2494:8	
2694:16,17,18	2660:25	2628:24,25	2693:21	2494:9 2499:19	
2694:19,20,21	2668:11	2630:1,21	Thompson's	2502:8 2503:16	
2694:22,23,24	thereabouts	2631:25	2605:21	2507:17 2508:3	
2694:25	2599:9	2634:11	2656:16	2514:11	
tests 2508:14	thing 2485:22	2639:15 2645:2	Thompson2720	2515:25	
th 2577:8	2491:14 2532:5	2653:25	2693:15	2522:22 2531:1	
thank 2463:10	things 2466:11	2655:24 2656:7	Thompson2763	2539:15	
2464:6 2467:10	2469:22	2658:6 2660:1	2694:3	2546:15	

	_	_	_	
2547:16 2549:3	2574:20	2529:8,10	2586:25	2569:14
2574:6,24	2593:10,11	2530:20 2544:4	2598:23	2582:21
2576:10	2691:2	2545:15	2620:17	2584:10
2580:17	<b>TONC</b> 2461:4	2546:12	2621:10 2622:9	2590:21
2581:13	tone 2545:16	2547:22	2630:3,5	2591:20
2586:23 2593:3	tonight 2691:1	transferred	2634:8 2651:23	2609:14 2627:5
2597:16,19	top 2486:17,21	2608:19	2652:1 2657:16	2649:7 2658:19
2604:24	2541:8,13	transformation	2657:17	2658:21
2606:11 2607:6	2550:7 2561:2	2567:10	2658:14,16	2662:13
2615:14	topic 2575:16	Transformatio	2675:5 2676:24	2664:21
2626:16	topically 2559:3	2566:25	2682:18	2688:13,14,15
2640:19,24	total 2471:14	transforming	2696:10	two-thirds
2645:15	2473:3 2477:7	2642:10	try 2467:20	2619:24 2620:5
2658:13 2661:1	2557:23 2647:7	translated	2499:20	type 2470:16
2662:11,17	2662:19	2696:8	2536:17	2484:12
2677:14	2668:16,17	transmission	2548:11 2574:4	2555:14
2681:18	2671:13,22	2663:18	2602:25 2671:8	2583:18
2689:17,17	2673:21	transparent	2680:25	2667:16,25
2696:11	2688:11	2544:23	trying 2467:9	2670:1
times 2569:14	traditionally	Transportation	2468:23	types 2489:6
timing 2505:5,18	2636:5	2532:9	2471:20	2667:18
titled 2581:6	train 2545:8	treatment	2504:21	typically 2469:8
today 2477:21	trained 2492:17	2607:21,23	2530:24 2533:5	2545:24
2479:1 2480:13	transactions	trees 2466:21	2541:16	2560:10
2480:25	2562:5	trend 2506:10,18	2552:10 2559:3	2575:17 2663:4
2496:25 2516:1	transcribed	2521:20 2542:1	2579:5 2581:14	2681:9
2522:7 2545:7	2527:18	2542:2	2599:20 2657:8	
2547:2 2549:5	transcribes	trends 2501:8,13	2657:9 2665:2	U
2557:24	2526:7	2543:10	2675:24	uh-huh 2498:20
2571:16 2573:3	transcript	<b>Trial</b> 2532:25	turn 2486:4,16	2508:21
2574:17,19	2460:3 2464:10	tried 2468:21	2516:21	ultimately
2588:23 2593:9	2476:20	2505:22	2529:19 2536:7	2469:15
2594:16	2518:13	<b>trim</b> 2484:7,11	2567:18 2585:8	2485:21
2596:22	2525:20	2484:12	2607:18	2494:19
2628:18	2528:11	troughs 2496:16	2608:23	2664:13
2629:10	2538:13 2540:4	2496:17 2504:6	2635:21 2648:3	unable 2465:19
2654:14 2655:1	2543:21	2504:9,11,22	2658:11	2471:15,22,24
2655:3,20	2548:24	2641:18	turned 2483:19	unanimous
2662:18	2553:21 2556:6	trucks 2521:14	2658:8,8	2646:15
<b>told</b> 2499:11	2558:20	true 2465:5	<b>turning</b> 2647:15	unbeknownst
2500:11 2504:2	2567:18 2570:1	2466:11	2648:14	2591:16
2507:2 2509:16	2592:22	2480:25	<b>Tuxedo</b> 2462:20	uncertainties
2517:9 2532:15	2601:14 2632:5	2486:12	two 2496:13	2560:2 2566:14
2591:15	2696:9,10	2487:20 2505:8	2504:14 2521:4	unclear 2642:17
2620:16 2621:9	transcription	2515:4 2520:17	2534:16 2538:8	2642:19
2682:17	2696:9	2520:19 2522:7	2547:6 2554:19	underlying
tomorrow	transcripts	2575:24	2558:11	2562:17
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

	ī	1	1	1
2566:17 2568:2	2485:25	2519:13	Virginia 2607:16	walked 2470:3
2649:23	2533:15 2562:1	2521:22	2611:1,13,23	<b>Wall</b> 2489:5
understand	2580:11	2522:19 2524:1	2612:4,9,18,22	2526:24
2466:2 2474:18	2589:17 2595:6	2524:11	2612:23 2613:7	2527:17
2493:19 2495:9	2603:20	2529:21 2531:7	2615:18 2616:7	2528:13
2495:14	universe 2512:3	2531:16	2624:15 2626:6	2529:21
2507:14	university	2629:10	2626:19	wallboard
2516:24 2546:1	2570:17,21		2635:18	2483:20
2580:5 2599:19	unnecessarily	V	2636:13 2637:2	Wal-Mart
2604:8 2609:7	2466:21	<b>vain</b> 2470:14	2637:19 2638:6	2462:23
2616:25 2628:6	unprecedented	<b>Valley</b> 2594:1	2641:15 2695:6	2582:21
2634:24	2575:22 2578:2	<b>value</b> 2469:18	visibility 2507:14	<b>Wanachi</b> 2629:1
2642:16	unring 2602:25	2562:25	<b>vitality</b> 2637:11	want 2463:15
2644:22	<b>unusual</b> 2555:15	2649:22	voided 2653:4	2475:3,15
2652:18 2654:6	2575:13,20	<b>values</b> 2509:13	2656:18	2482:8 2503:12
2657:12 2658:4	2688:20	variables	2663:19	2505:9 2535:5
2658:5 2660:11	<b>update</b> 2563:6	2637:10	volatilities	2537:7,22
2669:24	2566:20 2592:4	various 2500:10	2513:23	2543:11,13,15
2677:25	<b>updated</b> 2600:10	2511:20	volatility 2491:5	2551:23
2680:12 2682:6	2600:11	2529:22	2495:4,5	2564:25
2682:12	<b>upheld</b> 2643:1	2555:12 2603:4	2496:9 2498:19	2576:19
understanding	<b>upward</b> 2501:4,8	2639:6	2502:17,23	2578:13 2579:5
2575:12	2501:13	vary 2624:3	2509:11,22	2580:24
2580:18	use 2488:22	vast 2463:11	2510:1,2	2607:19
2598:12 2599:3	2492:21	verbiage 2547:5	2513:23 2514:1	2629:13 2634:2
2602:12	2494:15	version 2515:10	2515:15,16,19	2639:17
2603:10 2642:9	2498:12	versus 2524:11	2516:19,22	2640:25
2642:21	2511:24	2549:18	<b>volume</b> 2460:7	2650:18
2660:12	2514:14	2642:11	2464:9 2476:19	2668:15
2664:23 2681:4	2522:17 2535:6	2656:19	2518:12	2678:13
2682:14,20	2539:13	2662:15	2538:12 2540:3	wanted 2469:21
understood	2547:12 2548:8	2678:24 2683:7	2543:20	2492:5 2500:24
2501:12	2555:11	2683:11,17	2548:23	2531:4 2549:9
2572:25	2561:11 2618:8	2684:1	2553:20 2556:5	2550:3 2552:17
undertook	2679:14,15	viability 2516:9	2558:19	2552:22
2469:1	2680:6,7	2620:8 2622:10	2569:25 2584:3	2569:13 2576:6
unexpected	2687:13 2688:7	2658:19	2601:13 2632:4	2578:14 2639:7
2561:24	users 2462:1	viable 2475:2 2624:16 2641:4	vortex 2687:13	2678:11
unfair 2576:8	2584:25		2687:17	wants 2463:20
unified 2667:24	uses 2531:21	vice-president	voted 2487:1	2463:24
union 2460:9	2555:10	2580:7	VUYLSTEKE	2576:12 2577:8
2461:3 2473:18	utility 2580:10	view 2559:16 2565:21 2660:2	2461:11	2579:3 2603:11
2473:21,21	2627:1 2638:12	viewing 2562:8	$\mathbf{w}$	Warwick
2474:15,17	2638:15	2566:7 2567:9	wages 2621:18	2627:15
2621:21	utility's 2612:6	violated 2468:5	wait 2545:7	wasn't 2492:4
Unions 2621:22	2688:11	violation 2576:9	waited 2618:12	2552:13
<b>United</b> 2481:15	<b>U.S</b> 2519:5,8,10	* 101au011 43 / 0.3	waited 2010.12	2568:11 2575:4
	1	! 	I	1

2593:3,13	2544:15	2657:5,6,8,8	2560:19	2485:18 2518:6
way 2466:5	west 2607:16	2688:25	wishes 2552:21	2518:9 2519:2
2468:12 2491:3	2611:1,13,23	we've 2463:20	withhold	2524:19,24
2491:4 2492:12	2612:4,9,18,22	2468:20,21	2645:12	2526:15,19
2492:15,16	2612:23 2613:7	2471:17	withstand	2527:9,12
2493:1,3	2615:18 2616:7	2498:10	2628:16	2528:4,8,18,21
2494:21	2624:15 2626:5	2505:22	witness 2479:11	2534:20 2538:9
2496:12	2626:18 2629:2	2523:19	2479:12,13	2539:2 2540:1
2498:23	2635:18	2528:23,24,24	2481:8 2485:17	2542:18
2516:21 2547:4	2636:13 2637:2	2542:1 2545:4	2534:18 2554:9	2543:16
2573:13,13	2637:19 2638:6	2545:4,22	2570:8 2571:23	2546:17 2549:2
2578:20 2641:3	2641:14 2695:6	2546:9 2575:17	2573:20 2575:5	2549:7 2552:18
2663:25	we'll 2476:2,3	2603:3,5	2575:21 2576:7	2553:17
2665:24 2683:8	2481:10 2497:2	whatsoever	2576:10 2580:1	2554:12,15,20
2687:6	2524:19	2576:12	2587:12	2555:2 2556:1
<b>Wayne</b> 2479:21	2530:23 2538:9	WHITNEY	2589:11	2558:16 2559:4
2692:6	2543:16 2549:5	2462:14	2591:24	2569:12,17,22
ways 2492:15	2553:17	wholesale	2593:18	2570:2,6
2679:3,12	2558:16	2467:12,19,21	2594:20 2596:4	2571:24 2572:3
weather 2555:17	2593:10	2469:13,13,25	2597:1 2643:8	2572:6,8,11,13
2555:18	2600:18 2603:9	2470:14 2599:5	2645:4 2666:10	2572:17,19,23
web 2467:4	2603:12	2614:21	witnesses	2573:9,14
week 2522:24	2631:23 2638:5	2619:15 2634:7	2552:19	2574:7,15
2534:15	2643:7 2645:16	2634:10,11,23	2575:14	2575:17
2549:12 2585:1	2691:1,2	2642:3,7,11,14	2577:23 2593:9	2576:19,23
2586:14 2605:4	we're 2463:5,7	2659:18	2645:3 2686:19	2578:12,23
2655:16,16,20	2464:2 2465:5	2660:16	2686:19	2579:8,14,21
2659:2,3,4,6	2471:5,13	2667:13 2676:1	witness's	2579:25 2580:2
2685:3	2476:7 2478:15	2676:1,6	2575:19	2580:23
weeks 2534:16	2478:21	2683:5 2686:6	wondering	2581:25 2585:3
weigh 2576:20	2486:19 2497:5	2686:13,20,23	2590:15	2586:1,7
welcome 2530:25	2502:18	2689:5	2665:22	2587:4,9,13
2593:17	2506:14,17,20	who've 2517:1	2668:13	2589:7,12,15
<b>WENDY</b> 2461:3	2510:25 2511:1	WILLIAM	Woodruff	2589:17,19,22
went 2469:12	2519:2 2536:3	2460:17	2460:15 2463:4	2589:24 2590:4
2473:8 2507:21	2537:8 2538:5	willing 2469:24	2463:15,19,24	2591:6,11,18
2509:24	2539:2,23	2470:18 2471:2	2464:4 2465:2	2591:22 2592:1
2527:18	2543:10	2530:1	2466:15 2467:4	2592:8 2593:8
2546:12	2544:23 2545:2	windows 2531:21	2467:7,13	2593:14,17,19
2569:14	2547:23 2549:2	2531:22	2468:6 2475:19	2594:22 2595:4
2612:14	2549:8 2552:18	<b>Winston</b> 2462:7	2475:22 2476:2	2595:6,8,10,12
2626:12	2555:24 2559:4	wire 2521:18,18	2476:7,15	2595:15,17,20
2640:13 2641:7	2570:2 2579:3	wish 2480:15	2478:3 2479:6	2595:22 2597:2
2641:12,20	2590:18,24	2573:1 2589:2	2479:10,15	2597:8 2599:22
weren't 2469:24	2593:5 2600:6	2591:7 2604:4	2481:4,10,13	2600:9,12,16
2512:11,14,19	2643:11	2645:7	2481:15,18,21	2600:20,22
2523:23 2530:1	2650:11 2657:4	wished 2559:15	2481:25	2601:9 2602:2
	I	I	l l	

2602:21 2603:9	2590:21	Y	2606:2,14,14	2645:14
2603:18,20,24	work 2472:22	<b>Y</b> 2460:17	2639:22	2653:18 2654:1
2605:18 2611:9	2475:1,15	Yeah 2514:25	2641:15	2661:21
2611:19	2481:23	2543:12 2564:6	2658:19,20,21	2662:15
2622:18 2623:1	2483:25 2484:9	2581:1 2649:21	2677:4 2689:18	2683:16,21
2623:4 2631:1	2484:13,24	2665:25 2684:7	yesterday 2463:7	2690:3
2631:21 2632:1	2485:12 2488:7	year 2483:17	2466:23 2477:2	<b>\$38</b> 2667:1
2635:12	2490:6,8,15	2486:1 2492:3	2495:11	<b>\$39.39</b> 2663:11
2638:23 2643:5	2498:15	2493:14,16,16	2497:19	<b>\$4.40</b> 2651:14
2643:10,15	2499:21,23	2494:2,6,8,16	2499:15 2502:3	<b>\$40</b> 2567:6,15
2644:4,9,13	2500:15 2502:5	2494:21,21	2502:5 2523:9	2568:1,7,11
2645:7,11,16	2511:10	2496:20	2572:25	2658:2
2645:23 2646:1	2550:15	2497:12 2498:4	2593:13	<b>\$50</b> 2564:21
2653:9 2656:12	2561:23	2498:5 2501:10	York 2614:15	2565:1,5
2659:10 2661:4	2596:13	2514:14	2615:18 2616:7	<b>\$668</b> 2472:10
2667:6 2668:5	2598:13 2627:6	2520:17,19,21	2624:14 2625:3	<b>\$8.25</b> 2674:18
2671:2 2675:8	2680:21	2521:4 2539:20	2625:6,6	<b>\$85</b> 2563:8
2678:7 2680:18	worked 2470:14	2555:10 2567:6	2634:3,9,17	2567:12,13
2684:5 2690:14	2482:16 2483:3	2567:15 2568:1	<b>Young</b> 2484:19	<b>\$9</b> 2674:22,24
2690:22,25	2483:15 2484:4	2568:8 2577:21	2484:20	<b>\$9.5</b> 2673:9
Woodsmall	2484:18	2580:16 2582:8		
2462:6,7	2498:23 2500:6	2605:10 2606:9	Z	
2481:14 2572:7	2500:12,14	2610:7 2617:3	<b>zero</b> 2641:21	<b>0036</b> 2601:3
2589:16 2595:5	working 2476:10	2630:10	ф.	<b>0224</b> 2616:1
2597:9,11	2482:22 2507:7	2640:23 2656:2	\$	<b>0225</b> 2620:12
2599:13 2600:2	2691:3	2663:7,23	<b>\$1.06</b> 2496:6,8	<b>08</b> 2549:18
2600:11,14,17	works 2489:11	2677:14	2509:10	
2600:21,23	2584:24	2687:14,14	<b>\$1.60</b> 2667:2	1
2601:7 2602:6	world 2524:12	years 2491:25	<b>\$100</b> 2681:14	1 2627:10
2602:22,23	worry 2486:19	2492:3 2493:15	<b>\$15</b> 2471:23	2637:20
2603:17 2607:5	2544:8	2493:20,21,22	2472:6	2651:19 2662:4
2631:24 2646:2	worse 2511:8,9	2494:3,4,7,7,15	<b>\$150</b> 2674:11	2662:6,22,23
2646:5 2650:12	worst 2532:12	2494:16,21,22	<b>\$170,000</b> 2558:7	2668:14 2671:9
2650:16,21	worth 2472:11	2494:23 2495:1	<b>\$20</b> 2612:24	2671:16
2653:7 2671:3	2565:5	2496:2,14,21	<b>\$200,000</b> 2558:8	<b>1J</b> 2636:14
2671:5,16,20	wouldn't	2497:7,22	\$23.50 2648:11	2637:3 2638:7
2671:21	2529:25 2530:5	2501:2 2506:11	<b>\$265</b> 2472:8	<b>1.1</b> 2584:14
2681:13 2687:2	2530:7 2585:19	2506:16	<b>\$28.03</b> 2663:10	<b>1.15</b> 2584:16
2693:10,14,20	2591:25	2509:10	<b>\$29</b> 2679:4,9,24	2668:23
2694:2	2657:16	2513:22	2680:8	<b>1.18</b> 2669:1,11
word 2504:20	<b>writing</b> 2551:3	2515:14 2524:2	\$30 2557:20	<b>1.2</b> 2662:7
2508:17 2535:7	written 2612:11	2524:13	\$300 2628:17	<b>1.23</b> 2678:16
2536:4 2597:19	2619:9	2554:19,22	<b>\$32.50</b> 2682:21	<b>1.29</b> 2669:4,11
2598:8,10	wrong 2464:3	2578:2,24	2689:19	<b>1.3</b> 2580:15
worded 2665:3	2530:4 2560:17	2580:21 2603:1	<b>\$33</b> 2672:10	<b>1.32</b> 2668:18
words 2505:7	2560:18	2604:9 2605:23	2678:12,15	<b>1.38</b> 2669:15
2547:13,16,19		2605:25 2606:2	<b>\$34</b> 2644:2	<b>1.39</b> 2669:14
	<u> </u>		<u> </u>	

<b>1.5</b> 2584:16	2505:17	<b>2</b> 2466:5 2505:14	2560:6 2562:7	<b>2495</b> 2692:8
2669:21	2554:23 2621:1	2505:16	2562:16 2563:9	2531-2536
<b>1.64</b> 2648:23	2622:13 2641:4	2559:14	2565:14 2568:6	2518:12
<b>1.81</b> 2648:9,13	2652:10	2560:13	2568:22 2583:2	<b>2542</b> 2695:2,3,4,5
<b>1/10ths</b> 2669:10	2663:21	2565:23 2566:4	2599:7 2615:15	<b>2544</b> 2695:2
<b>1:30</b> 2549:5	<b>12th</b> 2647:12	2619:19	2616:12,24	<b>2545</b> 2695:3
<b>10</b> 2491:25	<b>12/31/14</b> 2694:14	2628:17 2629:9	<b>2015</b> 2460:5	<b>2546</b> 2695:4,5
2492:3 2493:14	<b>12:30</b> 2549:5	2636:13 2637:3	2474:4,7	2556-2558
2493:16,20	<b>13</b> 2554:23	2637:20 2638:7	2503:1 2514:10	2538:12
2494:13 2495:1	2663:21	2662:21	2520:1 2581:21	2560-2584
2497:12 2498:3	<b>136</b> 2535:20	<b>2,000</b> 2475:10	<b>2016</b> 2501:8,18	2540:3
2498:5 2509:10	2536:2	<b>2.01</b> 2649:10	2503:1 2520:2	<b>2586</b> 2692:9
2513:22	<b>137</b> 2535:4,21	<b>2.1</b> 2584:9	2563:9	2587-2590
2514:13	2536:3,9,22	2664:18	<b>2017</b> 2472:3	2543:20
2580:21 2606:2	<b>14</b> 2541:20	<b>2.22</b> 2649:10	2477:22	<b>2593</b> 2692:10
2606:9,14	2581:13 2582:6	2664:18	2501:10,13,18	2595-2621
2677:4,14	2582:12	<b>20</b> 2577:25	2503:1 2514:20	2548:23
<b>10K</b> 2466:18	<b>15</b> 2471:13	<b>200</b> 2461:8	2514:22 2515:1	<b>2610</b> 2692:11
2485:20,24	2475:21	2462:11,16	2515:11 2517:2	<b>2626</b> 2553:20
2487:10	2494:13 2541:9	2696:5	2517:16	2692:12
2546:10 2557:6	2541:23 2578:2	<b>2000</b> 2535:16	2520:10,25	<b>2629</b> 2553:20
2562:9,15	2578:24	2536:8,12,25	<b>2018</b> 2501:18	2692:13
2566:9 2568:22	<b>16</b> 2482:13	<b>2006</b> 2641:14	2515:4 2520:7	<b>2631</b> 2692:14
2694:14	2535:17	<b>2009</b> 2601:5	<b>2019</b> 2472:3	<b>2632</b> 2556:5
<b>10Ks</b> 2554:6,19	2536:22	2609:15	2477:22 2515:6	2634-2635
<b>10Qs</b> 2546:10	2635:21	2610:10	<b>2020</b> 2515:8	2558:19
<b>10.1</b> 2647:5	<b>16.584</b> 2661:21	2641:22	<b>211</b> 2461:13	2646-2655
<b>100</b> 2629:14	2675:14	<b>2010</b> 2599:14	<b>22</b> 2486:16,21	2569:25
2681:13	<b>16.6</b> 2670:22	2600:3 2603:1	2549:13	<b>2656</b> 2692:17
<b>101</b> 2462:4	<b>162</b> 2558:13	<b>2011</b> 2478:14	<b>221</b> 2462:4	<b>2657</b> 2694:22,23
<b>103</b> 2674:2,4	<b>17</b> 2649:3,19	<b>2012</b> 2478:8	<b>2230</b> 2462:10	<b>2658</b> 2694:22,23
11 2460:5	2650:3 2651:21	2554:7 2557:3	<b>24</b> 2585:1	<b>2667</b> 2692:20
2498:18,22	2652:22	2600:3 2647:13	2629:15	<b>2669</b> 2692:21
2500:24 2512:2	<b>174</b> 2558:12	<b>2013</b> 2478:13	2636:13 2637:2	<b>2671</b> 2692:22
2512:3,6,7,23	<b>18</b> 2465:5	2480:22,23	2637:20 2638:7	<b>2672</b> 2692:23
2513:14 2532:9	2605:12 2656:4	2482:11 2485:3	<b>2462</b> 2694:14	<b>2673</b> 2693:2
2549:18	2656:19 2657:9	2541:24 2554:6	<b>2464</b> 2692:4	<b>2674</b> 2694:24,25
2590:11	2670:16,17	2557:8 2609:15	2464-2476	<b>2675</b> 2694:24,25
2669:10,11	<b>18.5</b> 2662:10	2611:1,14	2464:9	<b>2676</b> 2693:3
<b>11th</b> 2460:24	2670:17,19	2641:23 2695:6	24642471	<b>2679</b> 2693:6
<b>11/10ths</b> 2669:6	<b>1800</b> 2461:21	<b>2014</b> 2470:22	2694:13	<b>2680</b> 2694:20,20
2669:12	<b>19</b> 2607:20	2485:20 2486:2	<b>2479</b> 2694:14	2694:21,21
<b>11/100ths</b> 2669:9	<b>19th</b> 2616:12	2527:15	2488-2489	<b>2682</b> 2693:9
<b>111</b> 2461:8	<b>1901</b> 2461:4	2541:19	2476:19	2694:18,19
<b>115</b> 2554:6,24	<b>1980</b> 2629:10	2555:10,18	<b>2492</b> 2692:7	<b>2683</b> 2693:10
<b>116</b> 2554:6,24		2557:10 2559:8	<b>2493</b> 2694:16,17	2687-2688
<b>12</b> 2477:6,7,9	2	2559:9,12	<b>2494</b> 2694:16,17	2601:13
		I	I	I

2600 2602.11	2672.12	424-6779	2600.0 12 14	<b>607</b> 2571:10,12
<b>2690</b> 2693:11	2672:13		2690:9,13,14	
<b>2692</b> 2693:12	2674:21	2462:21	2694:15	2571:25
<b>2698</b> 2695:6,6,9	<b>33.2</b> 2662:3,6,20	<b>43</b> 2663:1	<b>54</b> 2663:23	2694:23
<b>2718</b> 2693:13	2662:23,24	<b>456</b> 2461:18	2664:4 2671:6	<b>608</b> 2588:7,14,16
<b>2719</b> 2693:14	<b>33.21</b> 2671:13,22	<b>48</b> 2648:21	<b>554-2237</b> 2461:5	2589:6,7
2719-2721	2673:9	2649:4,12	<b>573</b> 2461:19	2694:24
2632:4	<b>34</b> 2464:9	2651:1,3	2462:17,21	<b>609</b> 2588:7,14,19
<b>2723</b> 2693:16	2476:19	2652:20,21	573)443-3141	2589:6,7
<b>2727</b> 2693:17	2485:11	2672:21 2675:3	2461:9	2694:25
<b>2728</b> 2694:15	2518:12	2687:3	573)556-6622	621-5070
<b>2732</b> 2694:10,11	2538:12 2540:3		2462:5	2461:22
2694:12	2543:20	5	573)751-4857	<b>63rd</b> 2462:24
<b>2734</b> 2693:20	2548:23	<b>5</b> 2525:5 2608:2	2462:12	<b>63101</b> 2460:25
<b>2741</b> 2693:21	2553:20 2556:5	2614:12	573)797-0005	<b>63102</b> 2461:14
<b>2744</b> 2693:22	2558:19	2675:14 2691:1	2462:8	<b>63103</b> 2461:5
<b>2747</b> 2693:23	2569:25	2695:4	<b>58</b> 2473:3,4	<b>63105</b> 2461:22
<b>2749</b> 2693:24	2601:13 2632:4	<b>5,000</b> 2670:3		<b>63119</b> 2462:20
<b>2755</b> 2693:25	2672:16 2690:5	<b>50</b> 2494:13	6	635-7166
<b>2756</b> 2694:1	<b>35</b> 2658:2,8	2564:2,9	<b>6</b> 2525:7 2608:24	2461:19
<b>2759</b> 2694:2	2665:20	2681:23 2682:9	2609:13	<b>650</b> 2462:11
<b>2766</b> 2694:4	2687:24	2682:11	2614:12	<b>65101</b> 2462:8
<b>2768</b> 2694:5	<b>35.1</b> 2662:1	<b>503</b> 2643:19	2636:14 2644:5	65101-1575
<b>28</b> 2679:4,9,24	<b>36</b> 2649:7	2644:14,18	2647:16 2663:3	2462:4
2680:8	<b>360</b> 2462:15	2694:10	2671:17,21	<b>65102</b> 2461:18
	<b>3600</b> 2461:13	<b>504</b> 2643:19	2695:5	2462:16 2696:6
3	<b>37</b> 2497:22	2644:15,18	<b>60</b> 2663:23	65102-2230
<b>3</b> 2524:23	2666:25	2694:11	2664:4	2462:11
2532:24,25	<b>37.95</b> 2667:1	<b>505</b> 2643:19	<b>600</b> 2480:7	65205-0918
2533:1 2558:12	<b>38</b> 2667:1	2644:15,18	2481:3,4	2461:9
2623:11 2629:9	2669:16	2694:12	600HC/NP	<b>69</b> 2524:19,21
2672:20 2695:2		<b>532</b> 2464:2,5,7	2694:16	2525:9,19
<b>3.96</b> 2651:25	4	2537:25	<b>601</b> 2480:7	2526:13,15
<b>30</b> 2677:5,6,7	<b>4</b> 2525:2 2529:20	2694:13	2481:3,4	2527:5 2529:11
<b>31</b> 2485:20	2530:12,13,15	<b>533</b> 2465:5	2694:17	2532:25
2486:2 2568:22	2533:9,13	2466:14,15	<b>602</b> 2596:18,25	2567:19 2695:2
<b>312</b> 2461:17	2607:18	2467:14	2597:2 2694:18	
<b>314</b> 2461:5,22	2623:10,11	2485:21,22	<b>603</b> 2596:18,25	7
314)259-2543	2695:3	2694:14	2597:2 2694:19	<b>7</b> 2560:11
2461:14	<b>4.4</b> 2651:25	<b>534</b> 2644:1,5,12	<b>604</b> 2594:13,20	2562:23,24
<b>32</b> 2629:10	<b>4:50</b> 2691:6	2644:19	2594:22	2566:23,24
<b>32.50</b> 2648:7	<b>400</b> 2462:24	2653:13	2694:20	2609:1 2610:25
2650:14,16,22	<b>405</b> 2462:25	2658:23	<b>605</b> 2594:13,20	2644:5
2662:15	41 2658:9	2661:17	2594:22	<b>70</b> 2525:1,9
	<b>42</b> 2658:9	2662:14	2694:21	2527:2,3,8,9
2689:25 2690:4		2668.13	<b>606</b> 2571·10 11	2529.19
2689:25 2690:4 <b>33</b> 2460:7	<b>42.698</b> 2672:23	2668:13 2671:10	<b>606</b> 2571:10,11 2571:12 24	2529:19 2530:16 2541:3
2689:25 2690:4		2668:13 2671:10 2675:12 2687:3	<b>606</b> 2571:10,11 2571:12,24 2694:22	2529:19 2530:16 2541:3 2541:8 2559:9

2565:17 2695:3 71 2525:4.9 5257:21 2528:3 2528:4 2559:9 2695:4 71 2460:24 72 2525:6.9 2528:11.17.18 2564:14 2695:5 73 2557:9 2611:10.12.18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 838-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:19 2576:13 979 2600:21,24 2602:3 2603:13				
71 2525:4,9 2527:21 2528:3 2528:4 2559:9 2695:4 711 2460:24 711 2460:24 712 2455:6,9 2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73 105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 882:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 92644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 2581:20 9:20 2476:4 918 2461:8 2566:10 2676:13 979 2600:21,24	2565:17 2695:3	<b>979HC</b> 2695:9		
2527:21 2528:3 2536:8,12,24 2528:4 2559:9 2535:15 2695:4 4 2525:6.9 2536:8,12,25 23				
2528.4 2559.9 2695:4 711 2460:24 72 2525:6.9 2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:46,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 2587:11 95 2664:19 2676:13 979 2600:21,24				
2695:4 711 2460:24 712 2525:6.9 2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 88-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 922 2670:5 94 2557:11 95 2666:13 979 2600:21,24				
711 2460:24 72 2525:6,9 2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,620,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:13 979 2600:21,24				
72 2525:6,9 2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21   8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2662:4,6,2022 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:13 979 2600:21,24		2330.0,12,23		
2528:11,17,18 2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2564:14 2695:5 73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 73105 2462:25 77100 2461:21   8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848:1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	,			
73 2557:9 2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:19 2676:13 979 2600:21,24				
2611:10,12,18 2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2611:19 2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9+20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:19 2676:13 979 2600:21,24				
2635:18 2695:6 73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 26244:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:19 2676:13 979 2600:21,24				
73105 2462:25 751-3234 2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 29:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
751-3234 2462:17 7700 2461:21  8 82644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2462:17 7700 2461:21  8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
8       8 2644:5 2648:15       2665:10       2671:19       2672:20 2687:2       8:30 2691:2       807 2462:7       848-1014       2462:25       871 2462:20       88 2557:7       9       9 2644:6 2647:16       2648:3 2651:13       2662:4,6,20,22       2668:14 2671:7       9th 2461:8       2581:20       9:20 2476:4       918 2461:8       92 2670:5       94 2557:11       95 2664:19       2676:13       979 2600:21,24				
8 8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:13 979 2600:21,24				
8 2644:5 2648:15 2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7 9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2666:19 2676:13 979 2600:21,24				
2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 26664:19 2676:13 979 2600:21,24	8			
2665:10 2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 26664:19 2676:13 979 2600:21,24	<b>8</b> 2644:5 2648:15			
2671:19 2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2672:20 2687:2 8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
8:24 2463:3 8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
8:30 2691:2 807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
807 2462:7 848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
848-1014 2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2462:25 871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
871 2462:20 88 2557:7  9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17  9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
9       9       9 2644:6 2647:16       2648:3 2651:13       2662:4,6,20,22       2668:14 2671:9       2671:17       9th 2461:8       2581:20       9:20 2476:4       918 2461:8       92 2670:5       94 2557:11       95 2664:19       2676:13       979 2600:21,24				
9 9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
9 2644:6 2647:16 2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
2648:3 2651:13 2662:4,6,20,22 2668:14 2671:9 2671:17 <b>9th</b> 2461:8 2581:20 <b>9:20</b> 2476:4 <b>918</b> 2461:8 <b>92</b> 2670:5 <b>94</b> 2557:11 <b>95</b> 2664:19 2676:13 <b>979</b> 2600:21,24	9			
2662:4,6,20,22 2668:14 2671:9 2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	<b>9</b> 2644:6 2647:16			
2668:14 2671:9 2671:17  9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	2648:3 2651:13			
2671:17 9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	2662:4,6,20,22			
9th 2461:8 2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	2668:14 2671:9			
2581:20 9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
9:20 2476:4 918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24	<b>9th</b> 2461:8			
918 2461:8 92 2670:5 94 2557:11 95 2664:19 2676:13 979 2600:21,24				
<b>92</b> 2670:5 <b>94</b> 2557:11 <b>95</b> 2664:19 2676:13 <b>979</b> 2600:21,24	<b>9:20</b> 2476:4			
<b>94</b> 2557:11 <b>95</b> 2664:19 2676:13 <b>979</b> 2600:21,24	<b>918</b> 2461:8			
<b>95</b> 2664:19 2676:13 <b>979</b> 2600:21,24				
2676:13 <b>979</b> 2600:21,24	<b>94</b> 2557:11			
<b>979</b> 2600:21,24	<b>95</b> 2664:19			
	2676:13			
2602:3 2603:13	<b>979</b> 2600:21,24			
	2602:3 2603:13			
	1			