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Case Nos.: *ER-2004-0034 and HR-2004-0024 (Consolidated)*
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

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Missouri Public Service Commission

SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) and AQUILA NETWORKS-L&P (Electric and Steam)

CASE NOS. ER-2004-0034 and HR-2004-0024 (Consolidated)

Exhibit No. 90NP
Case No(s). ER-2004-0034
Date 2/23/04 Rptr KF

Jefferson City, Missouri
February 2004

** Denotes Highly Confidential Information **

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BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of Aquila, Inc., d/b/a Aquila Networks-L&P and Aquila Networks-MPS to implement a general rate increase in electricity.	)	Case No. ER-2004-0034
In the matter of Aquila, Inc., d/b/a Aquila Networks-L&P to implement a general rate increase in Steam Rates.	)	Case No. HR-2004-0024

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

David Murray, of lawful age, on his oath states: that he has participated in the preparation of the following surrebuttal testimony in question and answer form, consisting of 47 pages to be presented in the above case; that the answers in the following surrebuttal testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David Murray

Subscribed and sworn to before me this 11th day of February 2004.

D SUZIE MANKIN
Notary Public - Notary Seal
STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. JUNE 21,2004

Notary Public

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5 **d/b/a AQUILA NETWORKS-MPS (Electric) and**

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1 **SURREBUTTAL TESTIMONY**

2 **OF**

3 **DAVID MURRAY**

4 **AQUILA, INC.**

5 **d/b/a AQUILA NETWORKS-MPS (Electric) and**

6 **AQUILA NETWORKS-L&P (Electric and Steam)**

7 **CASE NOS. ER-2004-0034 & HR-2004-0024**

8 **(Consolidated)**

9 Q. Please state your name.

10 A. My name is David Murray.

11 Q. Are you the same David Murray who filed direct and rebuttal testimony in
12 this proceeding for the Staff of the Missouri Public Service Commission (Staff)?

13 A. Yes, I am.

14 Q. In your direct testimony, did you recommend a fair and reasonable rate of
15 return for the Missouri jurisdictional electric and steam utility rate base for Aquila, Inc.
16 d/b/a Aquila Networks-MPS and Aquila Networks-L&P (MPS and L&P)?

17 A. Yes, I did.

18 Q. What is the purpose of your surrebuttal testimony?

19 A. The purpose of my surrebuttal testimony is to respond to the rebuttal
20 testimony of Dr. Donald A. Murry, Mr. John J. Reed and Ms. Susan D. Abbott.
21 Dr. Murry sponsored rate-of-return direct and rebuttal testimony on behalf of Aquila, Inc.
22 (Aquila). Mr. John J. Reed sponsored rate-of-return rebuttal testimony on behalf of
23 Aquila, Inc. His testimony dealt with some specific issues regarding my rate-of-return

1 recommendation, but he also discussed other issues about Staff's position in this rate
2 case. He also discussed general concerns about the utility regulatory environment in
3 Missouri. Ms. Susan D. Abbott sponsored rate-of-return rebuttal testimony on behalf of
4 Aquila, Inc. She addressed her concerns with what she believes MPS's and L&P's
5 stand-alone credit rating would be assuming they issued their own debt.

6 **Response to Dr. Murry's Rebuttal Testimony**

7 Q. What is your general response to Dr. Murry's accusations that your
8 recommended rate of return is going to "imperil the financial health" of MPS and L&P?

9 A. While I have recommended a just and reasonable rate of return in this
10 proceeding for MPS and L&P, I recognize that there are other factors, such as Aquila's
11 failed non-regulated investments, that can have a dramatic effect on MPS and L&P's
12 financial health, such as MPS and L&P's increased cost of capital because of the
13 deterioration in Aquila's creditworthiness.

14 Although MPS and L&P could be financially healthy utilities on a
15 stand-alone basis, their connection to Aquila and its failed non-regulated investments
16 does not allow this. Aquila is now in the process of restructuring itself back to a
17 domestic, regulated utility. However, the regulated utilities will be burdened with the
18 obligations associated with the residual non-regulated debt remaining on Aquila's
19 balance sheet. This residual non-regulated debt reduces the Company's debt capacity
20 that it may need for investments in its remaining regulated properties. This residual
21 non-regulated debt will drive up the cost of the debt that Aquila is able to procure. MPS
22 and L&P's situation can be compared to that of two individuals who have a joint credit
23 account. One of the parties may be quite responsible and healthy financially, but the

1 spending spree of the other individual ruins the otherwise responsible individual's credit
2 rating. The responsible individual is now jointly responsible for the debt that the other
3 individual charged to the account even though he didn't receive any benefit from the
4 spending spree. However, his or her cost of funds is now higher than would otherwise be
5 the case. MPS and L&P's situation is even more dire because it isn't part of a joint
6 account. MPS and L&P do not issue their own debt. They depend on Aquila for their
7 capital needs. The remaining Aquila non-regulated debt after it restructures is the
8 responsibility of the regulated utilities, which includes MPS and L&P.

9 This Commission should have confidence that adopting my recommended
10 rate of return will not ultimately imperil the financial health of MPS and L&P. Although
11 the actual cost of capital for MPS and L&P is now higher because of Aquila's financial
12 deterioration, Aquila represents that it is not attempting to pass along these higher costs
13 to ratepayers, at least from the context that the rates will not be higher because of these
14 costs. Staff is also not recommending that MPS and L&P ratepayers pay for Aquila's
15 higher cost of capital as a result of its failed non-regulated investments. It is the fact that
16 MPS and L&P were not and are not fully insulated from Aquila's other failed businesses
17 that would result in these Missouri utilities being driven into bankruptcy with Aquila, if
18 such an event should happen. This is the case because they are not bankruptcy-remote
19 subsidiaries, they are operating divisions of Aquila.

20 Q. On page 2, lines 10 through 12 of his rebuttal testimony, Dr. Murry
21 indicates that your use of Aquila's capital structure as of the test year is flawed,
22 especially when considering that the Missouri electric affiliates' (MPS and L&P) capital
23 structures are more accurate. Do you agree with this characterization?

1 A. No. The capital structure that is "allocated" to MPS and L&P is far from
2 accurate. An examination of Aquila's current financial condition proves that this
3 allocation system is purely fictitious and has no evidence to support it. The equity that
4 Aquila claims is available to MPS and L&P are simply numbers on paper. These
5 numbers don't represent the amount of equity that MPS and L&P truly have available for
6 their operations. As I demonstrated in my rebuttal testimony, not only is it easily
7 understood that Aquila does not have the common equity to "allocate" to its divisions at
8 the ratios it proposes for ratemaking purposes in this case, but Mr. Rick Dobson, Chief
9 Financial Officer (CFO) of Aquila, freely admits that Aquila does not have the common
10 equity available to allocate at the desired levels. Consequently, the divisional capital
11 structures that Aquila desires to use for MPS and L&P for ratemaking purposes in this
12 case are inaccurate when considering the amount of equity that is available and should
13 not be used for ratemaking purposes. Even when Aquila was in better financial
14 condition, the capital structure that it supposedly "allocated" to its regulated divisions
15 was not consistent with basic financial theory when comparing the allocated ratios to
16 Aquila's consolidated capital structure. The capital ratios that are implied from Aquila's
17 "allocated" capital structure are fictitious. There is no evidence to support that this
18 proportion of capital is available to the Missouri operating divisions.

19 Q. On page 3, lines 8 through 10 of his rebuttal testimony, Dr. Murry
20 indicates that Aquila's consolidated capital structure is not consistent with the capital
21 structure that will support the assets of MPS and L&P during the period when the rates
22 set in this proceeding are in effect. Do you agree?

1 A. No. If anything, the consolidated capital structure of Aquila in the future
2 will be more closely linked to its regulated divisions because it is Aquila's stated
3 intention to return to a regulated utility company because of its failed non-regulated
4 investments. If I had chosen to update Aquila's capital structure through the update
5 period of September 30, 2003, then my capital structure recommendation would be even
6 more leveraged than the one I chose to recommend. This is because Aquila's book
7 common equity has eroded as it has incurred further losses while exiting non-regulated
8 investments. The September 30, 2003 updated capital structure represents the most
9 current known capital structure that supports the assets of MPS and L&P. However, I am
10 not recommending this capital structure because it is not consistent with how MPS and
11 L&P have been capitalized in the past as indicated by Aquila's historical capital
12 structures.

13 Q. Dr. Murry cites Bonbright, *et.al.*, in *Principles of Public Utility Rates*,
14 page 309, on page 5, lines 9 through 16 of his rebuttal testimony, in order to support his
15 contention that it is inappropriate to utilize the consolidated capital structure for
16 ratemaking purposes in this case. Do you agree that this supports his contention?

17 A. No. The first part of this quotation indicates that "...if the existing capital
18 structure is clearly unsound or is extravagantly conservative, the rule may need to be
19 modified in the public interest." I have demonstrated in my direct and rebuttal testimony
20 that Aquila's consolidated capital structure as of the test year is clearly sound. In fact,
21 Aquila's consolidated capital structure as of the test year is consistent with the way it has
22 historically been capitalized when it had investment grade credit ratings, meaning that
23 Aquila itself has deemed this capital structure to be sound for financing its operations.

1 The second part of the quotation that discusses the risk differential
2 between non-regulated and regulated activities implies that the consolidated capital
3 structure would not be appropriate for the financing of a public utility if the utility is
4 diversified. General financial theory indicates that if a company diversifies into riskier,
5 non-regulated activities, then it will have to maintain better financial ratios in order to
6 balance the additional business risk that the company faces from the non-regulated
7 operations. This would imply that a company would have to maintain more equity on a
8 consolidated basis in order to counter-balance its increased business risk. This is
9 consistent with the way in which Standard & Poor's evaluates the creditworthiness of the
10 utilities that it analyzes. Therefore, my use of Aquila's consolidated capital structure for
11 ratemaking purposes is appropriate, if not conservative, because it has had to contain
12 more equity because of its riskier, non-regulated operations in order to maintain its BBB
13 credit rating.

14 Q. Do you have any evidence from Standard & Poor's that supports your
15 position?

16 A. Yes. I introduced this research report in the last Aquila rate case, Case
17 No. ER-2001-672. On October 19, 2001, Todd A. Shipman, CFA, of Standard & Poor's
18 made the following comments regarding the affirmation of UtiliCorp's credit rating:

19 The ratings on UtiliCorp reflect its average business
20 position and gradually improving financial profile. The
21 regulated utility operations are supported by sales and
22 earnings stability derived from international geographic and
23 economic diversity. The credit profile of UtiliCorp's
24 unregulated operations is weaker than the company's core
25 utility business, but UtiliCorp placed a public offering of a
26 19.9% ownership stake in its Aquila Inc. energy marketing
27 and trading subsidiary in 2000 and intends to spin off the
28 rest of Aquila to its shareholders by the end of 2001.

> The operations of UtiliCorp after the spin-off of Aquila [This was previously the non-regulated subsidiary name. UtiliCorp changed its name to Aquila when it decided to align and identify itself with its non-regulated operations.] will be dominated by a collection of relatively low-risk, regulated utility assets. However, the improvement in the company's business profile is likely to be offset by an increase in its financial risk so that the overall creditworthiness of UtiliCorp will not improve. To the extent that the plans for Aquila are not accomplished as currently envisioned by the company, Standard & Poor's expects UtiliCorp to adjust the level of financial risk to remain consistent with its business risk so that its creditworthiness is held constant.

Although this Standard & Poor's (S&P) research report was published before S&P began to downgrade Aquila (formerly UtiliCorp), it supports my position that in the past Aquila had to maintain more common equity, and therefore less debt, in order to offset the increased business risk associated with its non-regulated businesses to maintain its BBB credit rating.

Q. Why do you believe the S&P report is implying that Aquila would have had to maintain more common equity in the past in order to offset the increased business risk from the non-regulated businesses?

A. Because Mr. Shipman specifically states that if Aquila (previously UtiliCorp) had spun-off most of the non-regulated operations, the Company's business profile would have improved because it would now be dominated by regulated utility assets. However, Mr. Shipman expected that this improved business profile would likely "be offset by an increase in its financial risk so that the overall creditworthiness of UtiliCorp would not improve."

Q. What is the generally accepted definition of "financial risk?"

1 A. The ability of a company to meet its debt obligations. If the amount of
2 debt in a company's capital structure increases, then this tends to increase the company's
3 financial risk. The percentage of debt that a company has in its capital structure is often
4 referred to as the amount of financial leverage the company utilizes.

5 Q. Why is it important to consider Aquila's business risk in the past in this
6 proceeding?

7 A. Because I am primarily relying on Aquila's historical consolidated capital
8 structures since 1990 to substantiate that Aquila's capital structure as of the test year is
9 appropriate for ratemaking purposes in this case. The above comments from
10 Mr. Shipman imply that Aquila could have utilized more debt leverage (higher
11 percentage of debt in the capital structure) in the past and maintained a BBB credit rating,
12 if the Company only had regulated utility operations. Therefore, my analysis of Aquila's
13 historical capital structures to test the reasonableness of my recommended capital
14 structure in this proceeding is conservative and appropriate.

15 Q. Dr. Murry indicates that Staff acknowledges the merits of using a
16 hypothetical capital structure when it issued its report to the Commission in
17 December 2002. Dr. Murry quotes part of this report on page 5, lines 24 through 29 of
18 his rebuttal testimony. Did Staff know what Aquila's capital structure would be as of the
19 test year, December 31, 2002 when it issued its report?

20 A. No. The Staff was trying to reassure the Commission that if there were
21 unique circumstances in the next Aquila rate case, it could address them if the situation
22 required it. If the circumstance required it, such as if the capital structure wasn't
23 reasonable as of the test year, then the Staff may have recommended a hypothetical

1 capital structure. However, now that the Staff has had the opportunity to review Aquila's
2 test year capital structure, it is comfortable with recommending this capital structure.
3 Based on its tests of reasonableness, namely being that the test year capital structure is
4 consistent with how Aquila has been financed during the 12-year period from 1990
5 through 2001, this capital structure is not "clearly unsound" as explained in Bonbright's
6 book *Principles of Public Utility Rates.*

7 Q. Dr. Murry cites from a Report and Order in Case No. ER-93-37 to support
8 his position that Aquila's proposed allocated capital structure has been accepted by this
9 Commission. Did he fail to mention any other cases in which this Commission adopted
10 the use of Aquila's consolidated capital structure?

11 A. Yes. I cited these cases, Case Nos. ER-97-394 and Case No. ER-90-101,
12 on page 11, lines 18 through 20 of my rebuttal testimony. These cases were fully-
13 litigated before the Commission. I also freely admitted that the Commission did accept
14 Aquila's allocated capital structure in the partially settled MPS rate case in 1993, Case
15 No. ER-93-37, so the Commission would have all information at its disposal to make an
16 informed decision as it relates to this case.

17 Q. On page 6, lines 20 through 27 of his rebuttal testimony, Dr. Murry
18 indicates that operating divisions of Aquila, Inc. (MPS and L&P) have insulated Missouri
19 ratepayers from the impacts of the costs of the non-regulated affiliates. Do you agree?

20 A. No. As I discussed previously, Standard & Poor's implied that Aquila
21 could have enjoyed a better credit rating if it had less business risk, namely non-regulated
22 businesses. This would have been the case as long as the financial risk, which includes
23 financial leverage in the capital structure, was held constant. It is only logical to

1 conclude that because Aquila's non-regulated businesses increased the business risk of
2 the Company and the regulated utilities had and still have to rely on Aquila for their
3 financing, that the cost of debt financing has been higher for the regulated utilities
4 because of non-regulated activities.

5 Q. Did Aquila commit to not pass through to ratepayers any incremental costs
6 of debt that are higher than BBB-rated debt?

7 A. Yes, but the comments from Mr. Shipman of Standard & Poor's implies
8 that in the past, if Aquila had not had the non-regulated businesses in its portfolio, then it
9 is possible, and even likely, that Aquila would have had a credit rating that was higher
10 than BBB, if financial risk were held constant.

11 Q. Did Dr. Murry make a downward adjustment to his recommended
12 embedded cost of long-term debt to take into consideration that Aquila would have had a
13 better credit rating than BBB if it were only made up of regulated operations, holding
14 financial risk constant?

15 A. No. Therefore, Dr. Murry's recommended cost of long-term debt contains
16 impacts of Aquila's non-regulated investments. If a regulated utility were insulated from
17 the other operations of its parent, then it would have to be a subsidiary with its own credit
18 rating and recognized as being insulated by Standard & Poor's. A division of a parent
19 company cannot be insulated. This was even acknowledged by Aquila during the
20 transcribed interview on July 16, 2003 in Case No. EF-2003-0465, *In the Matter of the*
21 *Application by Aquila, Inc. for the Authority to Assign, Transfer, Mortgage or Encumber*
22 *its Franchise, Works or System.* I cited this interview in my rebuttal testimony. The
23 following exchange occurred during that interview. I have included more than just

1 Aquila's admission that a division cannot be insulated in order to provide some context to
2 the discussion.

3 MR. BIBLE: This is Ron Bible. Are your
4 regulated operations insulated or ring fenced from
5 your non-regulated operations?

6 MR. EMPSON: I think there's two answers to that
7 question. First, from a regulatory perspective, when
8 we set rates, they are, in our belief, ring fenced or
9 insulated because we're basing the establishment of
10 rates on what an investment grade utility would be
11 with investment grade capital structure and debt
12 costs.

13 Second, on operational side, you heard from Glenn
14 the focus that we have on the utility operations to
15 make sure that we're maintaining the service quality
16 that we believe is important for a utility. So we
17 believe we have the tools in place to provide that
18 insulation at this point in time.

19 MR. BIBLE: Has any of the credit rating agencies
20 acknowledged or declared that your regulated
21 operations are insulated from your non-regulated
22 operations?

23 MR. DOBSON: Not to my knowledge. This is
24 Rick Dobson.

25 **MR. BIBLE: Can you in fact insulate or ring**
26 **fence a division?** (emphasis added)

27 **MR. DOBSON: Not to my knowledge, you can't.**
28 (emphasis added)

29 MR. EMPSON: Let me go back and make sure we
30 understand. From a total financial perspective? Is
31 that what you're referring to, Ron?

32 MR. BIBLE: I'm not thinking of any particular --
33 I'm thinking in terms of, you know, what you're
34 saying as far as you're insulated and ring fenced.

35 MR. EMPSON: We're looking at that, as I tried to
36 explain, anyway, from a rate making perspective,
37 that we are providing that and, therefore, the

1 divisions are in effect being ring fenced. In my
2 term ring fenced, meaning provided protection from
3 the other operations, having not an impact on them
4 during a rate making proceeding.

5 MR. BIBLE: But my previous question was have
6 any of the credit rating agencies acknowledged or
7 declared you to be insulated or ring fenced as far as
8 your regulated and non-regulated?

9 MR. EMPSON: That is correct, but to us that's
10 important from an Aquila, Inc. corporate
11 perspective, but Aquila, Inc., corporate is
12 effectively ring fencing utility operations by only
13 charging them an investment grade rate.

14 MR. DOBSON: This is Rick Dobson. I don't
15 believe I have ever asked the rating agencies that
16 particular question from a rate making perspective.
17 They look at it from a global, since there are no --
18 it's not set up as a public utility holding company
19 from a legal structure, then they just look at it from
20 a consolidated entity structure when they set rates.
21 I'm sorry, when they set a rating.

22 MR. MURRAY: So you're acknowledging that
23 credit ratings ring agencies do declare whether or
24 not there is a particular utility if it's in, say, a
25 subsidiary and a holding company structure,
26 whether or not it's ring fenced or insulated?

27 MR. DOBSON: No. I'm just saying I've never
28 asked them the particular question that you're
29 talking about now with respect to do you consider
30 our rates that we charge our ratepayers to be ring
31 fenced or insulated. I've never asked them that
32 question. I'm not sure they really care. They're
33 only looking at if there was a legal ring fence, like a
34 public utility holding company, they probably
35 would separately rate them, but since there's not a
36 legal ring fence, there's no separating. That's why
37 Aquila is rated as a whole.

38 MR. MURRAY: So there is a difference between
39 legal ring fencing and what you call ...

1 MR. DOBSON: There is a difference between legal
2 ring fencing and what Ron Empson is saying it.

3 MR. BIBLE: Would you agree that applies to the
4 term insulation also?

5 MR. EMPSON: Legal insulation versus what we're
6 talking about as a regulatory? Yes.

7 MR. DOBSON: Yeah, that would apply there too.

8 MR. BIBLE: So you acknowledge then that there
9 are certain insulation and ring fencing used in the
10 United States and by credit rating agencies versus
11 what you're using?

12 MR. DOBSON: I don't know. Maybe.

13 MR. BIBLE: Okay.

14 In the above interaction, Aquila personnel tries to distinguish between
15 what Aquila refers to as "ratemaking insulation" and "legal insulation." However, the
16 message is clear that MPS and L&P, because of the fact they are divisions of the
17 operating company Aquila, cannot not be "legally insulated" from the rest of Aquila's
18 operations. On page 8, line 23 through page 9, line 2 from the discussion above,
19 Mr. Empson indicates that in his mind MPS and L&P are insulated because Aquila is
20 "basing the establishment of rates on what an investment grade utility would be with
21 *investment grade capital structure and debt costs.*"

22 Based on Dr. Murry's testimony that the debt costs of the Missouri
23 operating divisions are capped at the debt costs of a BBB-rated utility, one can only
24 presume that when Mr. Empson indicates that Aquila's definition of insulation means
25 that they will only base rates on the costs associated with an investment grade utility and
26 its corresponding capital structure, he means a BBB-rated utility.

1 Q. What was Aquila's credit rating for the period 1990 through 2001 shown
2 on Schedule 1 attached to your rebuttal testimony?
3 A. BBB.
4 Q. What was Aquila's average common equity ratio for this period?
5 A. 38.41 percent.
6 Q. Is the common equity ratio of 47.5 percent requested by Aquila in this
7 case consistent with Aquila's average common equity ratio when it had a BBB credit
8 rating?
9 A. No.
10 Q. Is it possible, or even likely, that Aquila could have enjoyed a higher
11 credit rating than BBB, which is the cost that Aquila wishes to charge utility ratepayers,
12 if it had not had the business risk associated with its non-regulated investments, assuming
13 constant financial risk?
14 A. Yes.
15 Q. Doesn't this mean that even from a ratemaking perspective that Aquila's
16 operating divisions, MPS and L&P, are not insulated from Aquila's non-regulated
17 investments?
18 A. Absolutely.
19 Q. What is the only truly recognized way to insulate a utility?
20 A. Through structural and regulatory measures that would be recognized by
21 the credit rating agencies. For example, in the "Behind The Ratings: 'Ring-Fencing' A
22 Subsidiary" article in the *Standard and Poor's CreditWeek*, October 27, 1999, Standard
23 & Poor's provided the following as examples of insulating conditions:

1 **STRUCTURAL INSULATION**

2 -Partial ownership of a subsidiary by an outside party,

3 -Separate boards of directors for each entity (preferably with

4 outside representation),

5 -Separate management,

6 -Separate country or jurisdiction,

7 -Separate name,

8 -Absence of cross-default covenants, and

9 -Separate financing activities.

10 **REGULATORY INSULATION**

11 -Restrictions on cash flow,

12 -Restrictions on debt as a percentage of capital,

13 -Restrictions on dividends,

14 -Debt rating targets established by a commission,

15 -Limitations on the amount of investment in nonutility businesses, and

16 -Limitations on the types of investments that a utility or holding

17 company can make.

18 Because Standard & Poor's (S&P) service is to assess the credit quality of

19 companies' debt issuances that subscribe to its service, it is only natural that the company

20 would have to issue its own debt in order for this service to be of use. Therefore, a utility

21 would have to be a separate subsidiary that issues its own debt in order for S&P to

22 provide an assessment of the insulation, or lack thereof, of the utility subsidiary.

1 Consequently, creditors are only concerned about insulation of a utility if they are lending
2 funds directly to a utility subsidiary.

3 Q. What is the average credit rating for utility companies that emphasize a
4 more traditional regulated corporate structure?

5 A. According to a recent January 29, 2004 Standard & Poor's (S&P) research
6 report, "U.S. Utilities' Ratings Decline Continued in 2003, But Pace Slows,"
7 S&P indicated that "companies that continue to emphasize a more traditional regulated
8 structure, whether vertically integrated or not, should hang onto an 'A-' average."

9 Q. Why do you think it is important to point out this average credit rating?

10 A. Because, Aquila has indicated that because it is not going to charge MPS
11 and L&P ratepayers more for its cost of capital than a BBB-rated utility and its
12 corresponding capital structure and cost of debt, it is insulating ratepayers from increased
13 costs associated with its failed non-regulated investments. If the average credit rating for
14 traditional, regulated utilities is an A-, then it would appear that this would be a more
15 appropriate credit rating to use for the cost of debt than a BBB credit rating. However,
16 because I am recommending the test year capital structure that is consistent with Aquila's
17 historical capital structure when it was rated BBB, I decided to utilize the BBB rating in
18 my own recommendation.

19 Q. Did Aquila provide Staff with some logic in the July 16, 2003 interview as
20 to why they chose to base the rate of return charged to ratepayers on a BBB credit rating?

21 A. Yes. The following exchange occurred:

22 MR. BIBLE: How did you determine triple B is the
23 appropriate credit rating to use to determine what
24 you would charge that debt out at?

1 MR. EMPSON: We went back and looked at the
2 last ten years of the Company were at triple B,
3 when we were going through basically all the
4 regulatory proceedings and things. We just looked
5 at that was our historical amount when we were
6 investment grade that we raised capital at, and that's
7 what we're charging today.

8 MR. BIBLE: And over those last ten years, what
9 did the Company look like? I mean, what kind of
10 operations were you in?

11 MR. EMPSON: It's going to vary when you look at
12 each year. If you go back ten years ago what we
13 were might have been primarily a utility operation
14 with relatively small amount of non-regulated going
15 on, and it grew to a more dominant position of non-
16 regulated.

17 MR. BIBLE: And now that you're going back to
18 strictly regulated, you determined triple B is the
19 appropriate credit rating to use?

20 MR. EMPSON: For this allocation process, yes, we
21 did.

22 MR. BIBLE: So what you're saying is you went
23 from predominantly regulated utilities with a triple
24 B credit rating, went into a relatively large, non-
25 regulated operation, and were still triple B, and now
26 that you're going back to predominantly regulated
27 operations, you determine you're going to remain
28 triple B?

29 MR. EMPSON: That's what we've done at this
30 point in time for what the charges are going to be;
31 that is correct. We don't know what the actual
32 rating will be when we reach our end state, but
33 during this transition, we're using what we were at
34 the time when we started the transition.

35 MR. BIBLE: So you moving predominantly into
36 non-regulated operations had no impact on your
37 credit rating?

38 MR. EMPSON: The information I saw is we stayed
39 at triple B for an entire decade.

1 MR. DOBSON: This is Rick Dobson. It did not
2 have an impact until early 2002, and then by mid
3 2002, we were downgraded.

4 MR. MURRAY: This is David Murray. Did your
5 risk profile change? There is a risk profile of one to
6 ten by Standard & Poors. Did you risk profile at
7 that time?

8 MR. DOBSON: I don't have the exact information
9 on that. This is Rick Dobson again. But if you
10 want to make a request, we can get that. I believe it
11 did, but I can't say for sure. It did change.

12 MR. MURRAY: Doesn't the Standard & Poors
13 require stronger financials at higher risk profiles?

14 MR. DOBSON: I'm sorry. Would you please
15 repeat the question?

16 MR. MURRAY: Just say Standard & Poors, let's
17 go to an agency we refer to quite a bit. As the risk
18 profile changes, do they require better financial type
19 of ratios?

20 MR. DOBSON: It does vary, but as the risk profile
21 does change, they do require you to have, for
22 instance, probably a bigger -- bigger either cash
23 contingency or a bigger equity base or a whole
24 variety of factors. Or a better coverage ratios, and
25 until really mid 2002, we had those. So that's why
26 we maintained our investment grade rating and
27 issued securities under that type of credit spread.

28 Q. From the discussion above, what was Aquila's logic in using a BBB credit
29 rating and associated capital structure and debt costs to determine what should be charged
30 to Missouri ratepayers?

31 A. The historical credit rating of Aquila for the last ten years, which has been
32 suppressed by its non-regulated operations.

33 Q. What capital structures did Standard & Poor's evaluate over the last ten
34 years in order to determine that a BBB credit rating was appropriate for Aquila?

1 A. Aquila's consolidated capital structures.

2 Q. Were these the same capital structures that you evaluated and attached as
3 Schedule 1 to your rebuttal testimony in order to determine that your recommended
4 capital structure was reasonable and appropriate for ratemaking purposes in this
5 proceeding?

6 A. Yes.

7 Q. If Aquila's consolidated capital structure would have been more like the
8 allocated capital structure that Dr. Murry is proposing, then wouldn't it be logical to
9 conclude that Aquila would have enjoyed a better credit rating even with its
10 non-regulated investments included in the operations?

11 A. Yes.

12 Q. Isn't it logical to conclude that Aquila's credit rating would have been
13 even better yet if Aquila's consolidated capital structure was the same as the allocated
14 capital structure and it did not have the non-regulated operations in its business portfolio?

15 A. Yes.

16 Q. Do you know what the credit rating could have been?

17 A. No, but based on all of the information that I reviewed it would have been
18 higher than the BBB that it had with the non-regulated operations and its historical capital
19 structures.

20 Q. Did Dr. Murry adjust his embedded cost of long-term debt downward to
21 take this into consideration?

22 A. No, but because Aquila's non-regulated operations put downward pressure
23 on the Company's credit rating, he should have.

1 Q. On page 7, line 9, through page 8, line 9, Dr. Murry criticized your
2 recommended cost of common equity to apply to MPS and L&P because it was not
3 consistent with the 2003 estimated return on equity for your comparable companies.
4 Should comparisons of actual or estimated returns on common equity as a test of
5 reasonableness for determining a fair recommended return on equity in a rate case
6 proceeding be used with caution?

7 A. Yes. One doesn't need to look any further than the Commission's recent
8 complaint case against AmerenUE, Case No. EC-2002-1 to understand this concept. If
9 Staff measured the reasonableness of its recommended return on equity based on
10 AmerenUE's recent and estimated return on common equity before its rates were
11 reduced, then AmerenUE would be in a perpetual overearnings situation because the test
12 of reasonableness would have been the return on equity that Staff and this Commission
13 determined to be excessive. Of course, this analogy presumes that the Staff would have
14 let this test of reasonableness influence its cost of common equity recommendation in the
15 AmerenUE complaint case, which wasn't the case. This is the very reason that the
16 recommended return on equity in a rate case proceeding is based on the cost of common
17 equity and not on what past returns on common equity have been.

18 Q. On page 9, lines 4 through 6 of his rebuttal testimony, Dr. Murry criticizes
19 your comparable companies because of what he claims are the use of "unhealthy" utilities
20 to compare to a "healthy" electric utility. Would you agree that MPS and L&P are
21 currently considered "healthy" utilities?

22 A. No, not from a creditworthiness perspective, because of their link to the
23 parent company, Aquila. In fact, even though Dr. Murry is correct that DPL's bond

1 rating had dropped to BB as of December 10, 2003, which was after my testimony was
2 filed on December 9, 2003, all of my comparable companies have a better credit rating
3 than Aquila, B, and therefore, MPS and L&P.

4 Q. Aren't you trying to determine what the cost of capital would be for MPS
5 and L&P if they weren't part of Aquila?

6 A. Yes. Contrary to Dr. Murry's accusation on page 14, lines 22 through 23
7 of his rebuttal testimony that I substituted a "mindless set of calculations and averages for
8 an analysis of the market data," I critically analyzed the results of my DCF analysis to
9 arrive at my estimated growth rate of 3.10 percent to 4.10 percent. My recommended
10 growth rate resulted in my reasonable cost of common equity recommendation of
11 8.64 percent to 9.64 percent to apply to the regulated utility divisions, MPS and L&P.

12 Q. Do you have any information that verifies the reasonableness of the
13 3.10 to 4.10 percent growth rate that you recommended in this case?

14 A. Yes.

15 An indicator that my estimated growth rate is reasonable is the fact that
16 the Department of Energy's "Annual Energy Outlook 2004" states "[c]ontinued
17 saturation of electric appliances, installation of more efficient equipment, and the
18 promulgation of efficiency standards are expected to hold growth in electricity sales to an
19 average of 1.8 percent per year between 2002 and 2025." A Standard & Poor's
20 January 2000 report in its Global Utility Rating Service confirms that this is typical for
21 Aquila's service area. This report indicated that Aquila's (then UtiliCorp's) "annual
22 electric sales and customer growth have averaged about 2 percent and are expected to
23 continue at that growth rate for the foreseeable future. Sales growth will be supported by

1 expected modest increases in customer base." This can be considered as a good proxy of
2 the projected customer and sales growth rate for MPS and L&P. It is important to
3 consider these growth rates when estimating the possible growth of MPS and L&P
4 because they are captive entities that are limited in customer growth by their certificated
5 areas of service. This means that other than any additional customers that may be added
6 to their systems in the future, the only other means of revenue growth is through
7 increased consumption of electricity. Of course, some growth in earnings can come from
8 the reduction of expenses. In light of the above estimates on electric sales
9 growth/demand, I believe that my 3.1 to 4.1 percent growth rate is reasonable.

10 A second test of reasonableness are comments from Aquila itself. Aquila
11 recognized the lower growth associated with regulated electric utility operations in its
12 2000 Annual Report when it stated, "most regulated utilities achieve lower earnings
13 growth that is well below the financial goals we have set for UtiliCorp [now "Aquila"]
14 the past several years." Aquila emphasized the lower growth of regulated operations
15 again in its 2001 Annual Report when it stated the following:

16 About two-thirds of our projected earnings this year will be
17 from energy merchant and risk management activities and
18 from international network operations. All of those have
19 higher returns and higher growth potential than our
20 networks in the United States, which are the most regulated
21 of all our businesses. Still, the Domestic Networks
22 segment remains a stable base of earnings and cash flow.

23 I believe all of the above indicators on electricity demand growth show the
24 reasonableness of my recommended growth rate in this case.

25 Q. Do you have any comments regarding Dr. Murry's criticism about your
26 selection of comparable companies that have total capitalization of less than $5 billion

1 because he feels that this allows for too large of companies to be used in your proxy
2 analysis?

3 A. Yes. As indicated on Schedule 9 attached to my direct testimony,
4 Aquila's total capitalization as of the test year was around $4.5 billion. Because MPS
5 and L&P are part of the larger company, Aquila, it is appropriate to evaluate companies
6 that have similar capitalization levels. Actually, if the parent company of a division or
7 subsidiary utility operating in Missouri is predominately in the same business as the
8 Missouri utility and its stock is publicly traded and pays a dividend, then Staff tends to
9 use the parent company's cost of common equity as the proxy for the cost of common
10 equity for the Missouri utility. The Commission accepted this methodology in the St.
11 Louis County Water rate case, Case No. WR-2000-844. In its Report And Order the
12 Commission stated:

13 The Commission concludes that the evidence in this case
14 shows the DCF model to be the best approach. The
15 Commission also concludes that, of the applications of the
16 DCF model in this case, Staff's DCF analysis of AWK is
17 the most pertinent to the determination of the Company's
18 cost of capital. Staff's approach is the best because it is the
19 purest application of the DCF model in the sense that it
20 relies primarily on publicly reported data with little
21 adjustment by the analyst. It is also the most appropriate
22 because it uses the best proxy for the Company the
23 Company's parent. The analysis performed by Public
24 Counsel witness Burdette and Company witness Walker do
25 not as accurately reflect the cost of equity for the Company
26 because their proxy groups do not as closely approximate
27 the Company as does AWK. In addition, they both made
28 significant adjustments to the results of their DCF analysis.
29 Mr. Walker's use of electric utilities to determine the
30 Company's ROE is a significant flaw.

31 Because MPS and L&P receive their capital from the parent company,
32 Aquila, it is appropriate to use companies that have capitalization levels similar to that of

1 Aquila. The studies that have been done about the "small size effect" relate to
2 stand-alone, publicly-traded companies, not divisions of larger companies.

3 Q. Did the use of DQE and IDACORP in your comparable companies bias
4 the results of your analysis as Dr. Murry claims on page 11, line 12 through 13 of his
5 rebuttal testimony?

6 A. No. These companies met the criteria I applied to the electric utility
7 companies on Schedule 11 of my direct testimony. If anything, excluding these
8 companies would have biased my results. I evaluated all of the financial data for my
9 comparable companies and determined a reasonable recommended cost of common
10 equity for the Missouri regulated divisions, MPS and L&P.

11 Q. On page 12, line 2 and line 9, Dr. Murry criticizes the average historical
12 and projected growth rates of two of your comparable companies. Did you recommend
13 these growth rates in your overall recommended cost of common equity for MPS and
14 L&P?

15 A. No. My recommended range of growth is 3.10 to 4.10 percent. This is
16 clearly stated on Schedule 16 attached to my direct testimony.

17 Q. Dr. Murry indicates that because you included a company in your
18 comparable group that cut its dividend, you have violated an assumption underlying the
19 DCF model. How do you respond?

20 A. As indicated on page 25, lines 5 through 7 of my direct testimony, more
21 often than not the assumptions underlying the DCF model are rarely met, but the DCF
22 model is a reasonable working model describing an actual investor's expectations and
23 resulting behaviors. As with any analysis, the rate-of-return witness has to review the

1 financial data in light of these assumptions, but the fact that these assumptions may not
2 hold true does not mean that using the model with companies that are not constantly
3 growing their dividends renders it useless. Although The Empire District Electric
4 Company (Empire) is not able to constantly grow its dividends because of high payout
5 ratios, both Dr. Murry and I applied the DCF model directly to Empire in their last rate
6 case, Case No. ER-2002-424. Empire's 5-year dividends per share (DPS) growth rate
7 was 0 percent in the last rate case and the 10-year DPS growth rate was .48 percent.
8 However, I recommended a growth rate of 3 percent to 4 percent for purposes of my
9 recommended cost of common equity in that case. Obviously, the analyst has to review
10 the various growth rates to determine if they appear to be reasonable going forward, just
11 as Dr. Murry rejected most of his low DPS growth rates indicated on Schedules DAM-8
12 and DAM-11, attached to his direct testimony in this case.

13 Q. On page 14, line 21 through page 15, line 3 of his rebuttal testimony,
14 Dr. Murry indicates that you substituted a "mindless set of calculations and averages for
15 an analysis of the market data..." He also characterizes your analysis as "formulistic
16 calculations" that were reduced to "meaningless data manipulations." How do you
17 respond to these generally negative comments about your analysis and what he implies is
18 your lack of analysis of the market data?

19 A. I find some of these comments interesting in light of the recent capital and
20 economic environment. Interest rates are at forty to fifty-year lows and have even come
21 down further since Aquila filed its last rate case in June 2001, yet Dr. Murry's
22 recommended cost of common equity (12.00 percent to 12.50 percent) is actually higher
23 than what Aquila recommended in the last rate case (11.75 percent to 12.25 percent).

1 Most rate of return witnesses, including company rate of return witnesses, freely admit
2 that the cost of capital, including the cost of common equity for utilities, is highly
3 correlated with the level of interest rates. As interest rates rise, the cost of capital for
4 utilities rises. As interest rates fall, the cost of capital for utilities falls. We are currently
5 in a low interest rate environment and therefore a low cost of capital environment.

6 I also considered some of the recent comments and analysis of some well
7 known and respected individuals in the finance field when determining if my overall
8 recommendation was reasonable. Therefore, contrary to Dr. Murry's statement that my
9 analysis is "mindless" and doesn't take into consideration market data, I was very
10 cognizant of the market when evaluating the reasonableness of my recommendation.

11 Q. *Who are some of the well respected financial experts that you believe have*
12 *good insight into the market and what have their comments been recently?*

13 A. The experts include Warren Buffett, Jeremy Siegel and Cliff Asness.
14 Warren Buffett is CEO of Berkshire Hathaway and is probably the most respected
15 investor in the United States. On December 20, 2001, in an interview on CNBC,
16 Mr. Warren Buffett indicated that "returns in the stock market should come in around an
17 average 7-8 percent over the next ten years." He also said that he's "not finding"
18 undervalued companies in this market, indicating that he remains watchful of valuation
19 levels for stocks. As recently as the release of Berkshire Hathaway's 2002 Annual
20 Report, Mr. Buffett stated that he was finding very few stocks that were even mildly
21 attractive even after the previous three years of falling stock prices. One would imagine
22 that with the recent run up in stock prices that this would only mean that Mr. Buffett is
23 currently even more cautious about investing in equities.

1 The other two, Cliff Asness, University of Chicago Ph.D., who writes
2 influential studies in academic journals while running the $5 billion hedge fund AQR
3 Capital Management, and Jeremy Siegel of The Wharton School of the University of
4 Pennsylvania, whose book, *Stocks for the Long Run*, helped mold academic thinking on
5 how equities perform over long periods, were recently featured in a recent June 16, 2003
6 article in *Fortune* magazine, "Can Stocks Defy Gravity? That's what Wall Street wants
7 you to believe. Don't buy it. The best minds say the market will rise, but it won't soar."
8 Although these are the two main academicians featured in the article, Kenneth French of
9 Dartmouth also urges caution when investing in today's market. Kenneth French and
10 Eugene Fama have published many influential stock market studies in the past two
11 decades.

12 All of the influential individuals featured in this article have come to the
13 conclusion that the equity risk premium, which is the additional return that investors
14 demand over risk-free government securities, is now lower. As a result of the lower
15 equity risk premium, they predict that the stock market as a whole can only provide
16 6 percent to 8 percent returns for the foreseeable future. Jeremy Siegel, when speaking
17 about total market returns, specifically states: "Better-than-average earnings, if they
18 happen, could get us perhaps 8%. But 10% assumes earnings growth that is just too big."
19 It is obvious that well-respected investors and academicians are not predicting very high
20 returns for the near future because of current stock valuation levels. This translates into a
21 low cost of common equity environment.

22 Comparing my recommended cost of common equity of 8.64 percent to
23 9.64 percent to the predictions of anywhere from 6 to 10 percent for the entire market by

1 these well respected individuals offers a barometer to the reasonableness of my
2 recommendation in this case. In light of the fact that regulated utilities are less risky than
3 the market, and therefore investors would normally require less return than the market,
4 my recommendation is generous considering the current stock market environment.

5 Q. On page 16, line 1 through page 17, line 2 of his rebuttal testimony,
6 Dr. Murry criticizes your CAPM analysis that indicated a negative risk premium. Does
7 your recommended cost of common equity contemplate a negative risk premium?

8 A. No. I think it is clear from page 30, lines 9 through 15 of my direct
9 testimony that I am not recommending a cost of common equity based on my short-term
10 risk premium CAPM results. However, I do point out the reasons why the CAPM results
11 using the risk premium from 1993 to 2002 are extremely low. While I agree with
12 Dr. Murry that investors in common stocks will expect a risk premium over risk-free
13 U.S. Treasury bonds in order to make that investment worthwhile, I don't think it is
14 appropriate to ignore the fact that there are times when risk premiums are negative. This
15 may not be what an investor expects, but the unfortunate reality of investing is that there
16 are times when investors' expectations are not going to be achieved and it would be
17 irresponsible for an investor to ignore this reality. Actual returns can be much higher and
18 much lower than what an investor expects, but over time, an investor can expect that
19 returns will converge around a mean, which is a concept referred to as "mean reversion."

20 Q. On page 17, lines 3 through 9 of his rebuttal testimony, Dr. Murry
21 indicates that you did not select the correct risk premium for your CAPM analysis for the
22 period 1926 through 2002. Did you select the correct risk premium?

1 A. Yes. The attached Schedule 1 is a copy of the table that I used from
2 Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2003 Yearbook. I
3 subtracted the arithmetic average annual returns on Long-Term Government Bonds
4 (5.8 percent) from the arithmetic average annual returns on Large Company Stocks
5 (12.2 percent) for the period 1926 through 2002 in order to arrive at a risk premium of
6 6.4 percent.

7 Q. On page 17, lines 10 through 20 of his rebuttal testimony, Dr. Murry
8 indicates that you should have made a "size adjustment" to your CAPM analysis. Do you
9 agree?

10 A. No. The adjustment for size premium that Dr. Murry advocates is based
11 on a study of all of the stocks in the New York Stock Exchange, the American Stock
12 Exchange and the Nasdaq National Market. The study did not apply specifically to
13 regulated utilities. Annie Wong, associate professor at Western Connecticut State
14 University, performed a study that was published in the Journal of the Midwest Finance
15 Association, Volume 22, that refutes the need for an adjustment based upon the smaller
16 size of public utilities. She indicates:

17 First, given firm size, utility stocks are consistently less risky than
18 industrial stocks. Second, industrial betas tend to decrease with
19 firm size but utility betas do not. These findings may be attributed
20 to the fact that all public utilities operate in an environment with
21 regional monopolistic power and regulated financial structure. As
22 a result, the business and financial risks are very similar among the
23 utilities regardless of their size. Therefore, utility betas would not
24 necessarily be expected to be related to firm size.

25 Because smaller utilities operate in a regulated environment, just as large
26 utilities do, making an adjustment for firm size appears to be questionable, especially
27 when the smaller utility is part of a larger company.

1 Q. On page 19, lines 1 through 17 of his rebuttal testimony, Dr. Murry claims
2 that you disregarded the financial integrity measures that you calculated on Schedule 21
3 attached to your direct testimony. Did you disregard these measures?
4 A. No. On page 32, lines 4 through 7 of my direct testimony I discuss the
5 pretax coverage ratios that I calculated on Schedule 21 and I observed that these ratios
6 fall between the lower quartile and median of a BBB-rated electric utility as reported by
7 Standard & Poor's on July 7, 2000. I also explained some of the limitations of this
8 schedule on page 31, line 20 through page 32, line 3 of my direct testimony. Because
9 Aquila is no longer investment grade, I had to make some assumptions about the interest
10 expense to use in order to calculate the pretax interest coverage ratios indicated on
11 Schedule 21. It is also possible to argue that the interest expense indicated on
12 Schedule 21 attached to my direct testimony could have been lower if MPS and L&P's
13 debt costs were not linked to Aquila's overall business risk. It is also possible that the
14 interest expense indicated on Schedule 21 could have been lower if Aquila's financial
15 condition allowed it to take advantage of current lower interest rates by refinancing some
16 of its debt as other Missouri electric utilities have done.
17 Q. Do you have any examples of Missouri utilities that have been able to
18 refinance some of their debt to take advantage of current lower interest rates?
19 A. Yes. On May 16, 2003, Empire announced that it was refinancing some of
20 its outstanding debt. On March 15, 2003 and August 15, 2002, AmerenUE announced
21 that it was refinancing various debt issuances. AmerenUE announced their refinancings
22 in the following press releases:
23 March 5, 2003 ¾ AmerenUE, a subsidiary of Ameren
24 Corporation (NYSE: AEE), announced today that it is

1 offering $184,000,000 of 5.50% senior secured notes due
2 March 15, 2034. The transaction is expected to close on
3 March 10, 2003. AmerenUE intends to use the net offering
4 proceeds of approximately $180,000,000, along with other
5 funds to redeem prior to maturity $104,000,000 principal
6 amount of outstanding 8.25% first mortgage bonds due
7 October 15, 2022, at a redemption price of 103.61% of par,
8 plus accrued interest, and to repay short-term debt incurred
9 to pay at maturity $75,000,000 principal amount of 8.33%
10 first mortgage bonds that were due in December 2002. The
11 lead underwriters for the offering are BNY Capital
12 Markets, Inc. and J.P. Morgan Securities Inc.

13 Aug. 15 /PRNewswire-FirstCall/ -- AmerenUE, a
14 subsidiary of Ameren Corporation (NYSE: AEE),
15 announced today that it is offering $173,000,000 of 5.25%
16 senior secured notes due Sept. 1, 2012. The transaction is
17 expected to close on Aug. 22, 2002. AmerenUE intends to
18 use the net offering proceeds of approximately
19 $171,400,000 to redeem prior to maturity $125,000,000
20 principal amount of outstanding 8.75% first mortgage
21 bonds due Dec. 1, 2021, at a redemption price of 104.38%
22 of par, plus accrued interest, and to redeem $41,437,500 of
23 Series $1.735 preferred stock at par, plus accrued
24 dividends. The underwriters for the offering are Banc of
25 America Securities, LLC, Credit Suisse First Boston and
26 U.S. Bancorp Piper Jaffray Inc.

27 Therefore, "healthy" Missouri utilities are cutting their interest expenses
28 by capitalizing on the current low cost of capital environment because of lower interest
29 rates.

30 Q. What will be the effect of Aquila's inability to take advantage of the
31 current lower cost of debt environment?

32 A. It will keep the cost of debt for its regulated Missouri utilities at a higher
33 level than other "healthy" regulated Missouri utilities' cost of debt.

34 Q. Do you have any other closing comments about the reasonableness of your
35 recommended cost of common equity in this proceeding?

1 A. Yes. I mentioned an article earlier in my surrebuttal testimony about what
2 well respected investors and academicians are expecting for future returns in the market.
3 This article also discussed what type of risk premiums investors can expect for stock
4 returns over treasury bond returns for the next ten years or so based on the current prices
5 of stocks. The article indicates that investors can expect to collect only 3 percent more
6 on the stock market as a whole than on Ten-Year Treasury Bonds. If one were to look at
7 the beta adjusted risk premium for my comparable electric utility companies and
8 Dr. Murry's comparable electric utility companies, the risk premium would be even less
9 than this 3 percent. Based on the average beta of .72 for my comparable companies, the
10 expected risk premium over Ten-Year Treasury Bonds would be 216 basis points. Based
11 on the average beta of .62 for Dr. Murry's comparable companies the expected risk
12 premium over Ten-Year Treasury Bonds would be 186 basis points. The midpoint of my
13 recommended cost of common equity for MPS and L&P is currently 501 basis points
14 higher than the Ten-Year Treasury Bond yield of 4.13 percent as of January 30, 2004 as
15 quoted on CBS MarketWatch's website, http://cbs.marketwatch.com. Therefore, based
16 on current financial market conditions, my recommendation is more than reasonable.

17 **Response to Ms. Abbott's Rebuttal Testimony**

18 Q. What is your general response to Ms. Abbott's rebuttal testimony?
19 A. Ms. Abbott gives her opinion on what she thinks MPS's and L&P's credit
20 rating would be on a stand-alone basis if they were not a part of the Aquila corporate
21 structure. Considering Aquila's current financial condition and the higher cost of capital
22 that it incurs to make investments in its utility properties, it would be nice to pretend that
23 Aquila's utilities are not affected by Aquila's problems, but unfortunately this is not the

1 case. The reason why Aquila will have low financial coverage ratios after it exits all of
2 its non-regulated businesses is not because of my recommended rate of return in this
3 case, but because of the **____** billion of non-regulated debt that will remain after
4 Aquila restructures itself into a domestic utility. Aquila provided this projected amount
5 of residual non-regulated debt after its restructuring process in the proceedings for Case
6 No. EF-2003-0465, *In the Matter of the Application of Aquila, Inc. for Authority to*
7 *Assign, Transfer, Mortgage or Encumber Its Franchise, Works or System.* This residual
8 amount of non-regulated debt left on Aquila's books has reduced the debt capacity of
9 Aquila for investment in its utility properties. Because MPS and L&P currently have to
10 rely on Aquila for its capital needs, this also reduces MPS's and L&P's debt capacity.
11 The debt capacity that Aquila does have will come at a higher cost.

12 It is not just the amount of debt that the regulated utilities will be burdened
13 with that will affect Aquila's interest coverage ratios, but also the cost of this debt that
14 will affect these coverage ratios. I have already discussed the fact that even before
15 Aquila was downgraded below investment grade because of its non-regulated business
16 failures, its credit rating was suppressed by Aquila's non-regulated activities. The
17 coverage ratios that Ms. Abbott calculates are making assumptions that MPS and L&P
18 are stand-alone, but unfortunately the cost of debt for MPS and L&P have been increased
19 by Aquila's non-regulated activities. Ms. Abbott did not make a downward adjustment to
20 what MPS's and L&P's cost of debt would be if their costs were not increased by
21 Aquila's non-regulated business risk exposure.

22 Additionally, because of Aquila's current financial condition as a result of
23 its failed non-regulated businesses, it cannot take advantage of the current low interest

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1 rate environment by refinancing the debt it currently has on its books at more favorable
2 interest rates. Many of Missouri's utilities have been taking advantage of this lower cost
3 of debt, just as homeowners have been able to when refinancing their mortgages. Again,
4 Ms. Abbott did not make a downward adjustment to take this into consideration.

5 Consequently, Ms. Abbott's analysis should be disregarded in this case.
6 She wants to pretend that MPS and L&P have not been affected by Aquila's financial
7 condition, but as I have demonstrated, this isn't the case.

8 Q. Do some of Ms. Abbott's comments in her rebuttal testimony cause you
9 some concern as to the ability of Aquila to continue to ensure that MPS and L&P will be
10 able to provide safe and adequate service?

11 A. Yes. *She says that her analysis indicates that if the Commission accepts*
12 Staff's position in this case, it would probably result in a B credit rating for MPS and
13 L&P if they were stand-alone companies. She also discusses how this B credit rating
14 would impact Missouri utilities. On page 20, lines 1 through 7, she indicates the
15 following:

16 If the core businesses of the Company, which is what
17 investors believe they are investing in, are to be subjected
18 to punitive regulatory treatment, investors opinions will
19 revert to the previous skeptical mode, making money much
20 more expensive for Aquila to attain. In the long run,
21 ratepayers pay for that higher cost of debt. **A more direct**
22 **and immediate impact on ratepayers is the quality of**
23 **the service they receive.** (emphasis added)

24 Consequently, Ms. Abbott is indicating that if Aquila experiences an
25 increase in its cost of capital, then it will affect the quality of service that ratepayers
26 receive.

27 Q. What is Aquila's current credit rating?

1 A. B.

2 Q. Has this resulted in an increased cost of capital for Aquila?

3 A. Yes.

4 Q. What caused Aquila's credit rating to be downgraded to its current level
5 of B?

6 A. Aquila's failed non-regulated investments.

7 Q. Does Ms. Abbott point out how these failed non-regulated investments
8 may ultimately impact the service to Missouri ratepayers?

9 A. Yes.

10 Q. Aquila has maintained that it would not attempt to pass along capital costs
11 that are higher than a BBB-rated electric utility. Does it appear that Aquila may be
12 positioning itself to attempt to pass along higher costs than a BBB-rated electric utility in
13 future rate cases?

14 A. Yes. It appears that Aquila will attempt to perform a credit analysis of
15 what their regulated utilities would be rated if they were stand-alone companies and then
16 indicate that the higher costs that these divisions are incurring are a result of the
17 regulatory environment in Missouri.

18 Q. Will it be clear as to whether Missouri regulation is a cause of higher costs
19 of capital for MPS and L&P if they remain divisions of Aquila?

20 A. No.

21 Q. Would there be any way for this to be more discernible in the future?

22 A. Yes. If the Missouri utilities were spun-off into their own subsidiary and
23 this subsidiary were ring-fenced from the rest of Aquila, then Aquila's management

1 could have more credible discussions with the Staff of the Missouri Public Service
2 Commission on the effects that Missouri regulation has on the cost of service to Missouri
3 ratepayers.

4 Q. Ms. Abbott is pretending that MPS and L&P are stand-alone companies in
5 order to evaluate their creditworthiness. Do you have to pretend in order to know what
6 L&P's credit rating was before it was acquired by Aquila?

7 A. No. L&P's credit rating was an A- before Aquila acquired it on
8 December 31, 2000. Therefore, it is obvious what its credit rating potential was before it
9 was acquired by Aquila, and therefore, influenced by Aquila's non-regulated operations.

10 Q. On page 5, lines 19 through 21 of her rebuttal testimony, Ms. Abbott
11 indicates that Moody's states the following about Aquila: "future projected revenues and
12 cash flow of its utilities are contingent upon favorable regulatory decisions regarding its
13 pending rate cases." From what perspective is Moody's indicating that Aquila needs
14 "favorable regulatory decisions?"

15 A. Obviously this is from the perspective of creditors. However, it is not
16 Staff's responsibility to ensure that its rate case recommendations are favorable to
17 creditors. Staff is responsible for balancing the interests of ratepayers and investors and
18 Staff has done so in this case.

19 Q. Should this Commission regulate the rates of its utilities with any specific
20 credit rating in mind?

21 A. No. While Staff believes that it should provide Missouri utilities a fair
22 opportunity to maintain its financial health, Staff also recognizes that there are some
23 things that are not within its control that can adversely impact Missouri utilities, such as

1 the presence of non-regulated operations as already discussed. The Staff has
2 recommended a fair and reasonable rate of return in this case. It is not Staff's
3 responsibility to recommend that rates be increased in order for a company to improve its
4 credit rating to some certain level, especially when that company's credit rating has
5 deteriorated because of activities other than Missouri's regulated operations.

6 Q. Ms. Abbott discusses Standard & Poor's business risk ranking system on
7 page 10, lines 9 through 15 of her rebuttal testimony. What has happened to Aquila's
8 business risk profile (ranked on a scale of one to ten with ten indicating the most business
9 risk) as ranked by Standard & Poor's since 1996?

10 A. It has increased from a four to a six. It is only logical to conclude that
11 Aquila's increased business risk profile resulted from non-regulated business exposure as
12 a result of the reasons that I have already discussed. In fact, when Aquila's non-regulated
13 subsidiary ("Aquila" before UtiliCorp adopted the name for itself) was rated by
14 Standard & Poor's (S&P), S&P assigned the non-regulated subsidiary a business profile
15 ranking of seven. This supports my previous testimony that Aquila had to maintain better
16 financial ratios, including a higher common equity ratio, in the past because of its
17 exposure to non-regulated operations. Ms. Abbott acknowledges this on page 13, lines 1
18 and 2 of her rebuttal testimony when she indicates that as "business risk grows, the
19 financial metrics need to be stronger."

20 **Response to Mr. Reed's Rebuttal Testimony**

21 Q. What is your general response to Mr. Reed's testimony?

22 A. Mr. Reed apparently has some insight that investors are not expecting the
23 Commission to adopt Staff's position in this case because he indicates the markets are not

1 currently expecting this. I presume he is referring to the recent increase in Aquila's stock
2 price even after the Staff filed its case on December 9, 2003. He anticipates that if the
3 Commission adopts Staff's position that this negative surprise will have a dramatic effect
4 on Aquila's stock price. Staff is not responsible for ensuring that Aquila's stock price
5 remains at any given level. In fact, Staff cannot rely on an analysis of Aquila's stock for
6 purposes of its recommendation in this case because Aquila's cost of capital exceeds
7 what is reasonable for a regulated electric utility. It is Staff's duty to determine the cost
8 of service for MPS and L&P, which includes a fair return on MPS's and L&P's rate base.
9 I have recommended a fair rate of return based on the current capital and economic
10 environment. This recommended rate of return is based on a reasonable capital structure
11 deemed reasonable by Aquila itself over the last twelve years. My recommendation is
12 not punitive. It reflects an estimate of the cost of capital that Aquila would be incurring
13 for its utilities if it hadn't suffered from failed non-regulated investments. Actually, I
14 have already argued that the cost of debt that is part of my rate of return recommendation
15 would have been lower if MPS and L&P were truly stand-alone entities that did not have
16 their credit ratings affected by Aquila's non-regulated investments.

17 Q. Mr. Reed discusses allowed returns and earned returns for other utility
18 companies in other states as reported by Regulatory Research Associates (RRA). How
19 do you respond?

20 A. I have done a thorough and complete analysis of the cost of common
21 equity for a comparable group of companies, primarily using the DCF model, which
22 incorporates the current capital and economic environments. I utilized this proxy cost of
23 common equity to recommend a fair rate of return to be applied to the rate base of MPS

1 and L&P. I have reservations about drawing inferences from the allowed ROE's in other
2 jurisdictions based on the very reasons that Mr. Reed discusses in his testimony. There
3 are many reasons why an allowed return on equity may be higher than the cost of
4 common equity for utility companies specific to each case in question. The Staff of the
5 Missouri Public Service Commission does not use allowed ROE's in other jurisdictions
6 in order to recommend a fair and reasonable ROE for utility companies in Missouri. We
7 predominately utilize the Discounted Cash Flow model in order to make a fair and
8 reasonable recommendation based on the capital and economic environments. If a
9 Commission were to constantly rely on what other Commissions were authorizing, or
10 even its own authorizations in prior cases, in order to determine what is fair, then the
11 allowed return on equity would never be reflective of the current capital and economic
12 environment.

13 Q. Do any of Mr. Reed's comments in his testimony support the
14 reasonableness of your recommended cost of common equity in this proceeding?

15 A. Yes. On page 19, line 21 through 23 through page 20, line 1, Mr. Reed
16 states the following:

17 In general, equity markets classify utility stocks as an
18 equity that has many of the attributes of a bond. As such,
19 all of the credit issues discussed by Aquila Witness Susan
20 Abbott in her rebuttal testimony are also relevant to how
21 equity investors perceive and value Aquila's stock.

22 Consequently, Mr. Reed is acknowledging that the cost of common equity
23 for utilities is closely tied to the cost of debt because they have the same attributes. This
24 is acknowledged by most expert rate of return witnesses in utility rate case proceedings.
25 Mr. Reed indicates earlier in his testimony that my recommendation runs "completely
26 contrary to current trends in financial markets." Contrary to Mr. Reed's statement, my

1 recommendation in this case reflects the current economic environment of interest rates
2 being at their lowest levels in forty years and closer to normal based on the level of
3 interest rates before the last forty years. I commented earlier about other Missouri
4 utilities taking advantage of the current lower interest rates by refinancing their existing
5 debt. If the cost of debt, which Mr. Reed acknowledges have similar attributes to utility
6 stocks, is at forty-year lows, then it is only logical to conclude that the cost of common
7 equity is also much lower. My recommendation reflects the current financial
8 environment that at least financially healthy utilities are able to capitalize on in order to
9 reduce their capital costs.

10 Q. On page 17, lines 9 through 17 of his rebuttal testimony, Mr. Reed
11 discusses the last MPS rate case in which Staff recommended a 9.93 percent cost of
12 common equity based on a 48.51 percent common equity ratio. He indicates that this
13 past recommendation should be considered as a lower bound for what is reasonable in
14 this case because he indicates that no changes have occurred in industry norms on the
15 cost of capital since then. Do you agree?

16 A. No. I have already discussed my concerns with the fact that Dr. Murry is
17 recommending a higher cost of common equity in this case than the cost of common
18 equity that MPS recommended in its last rate case. Dr. Murry did not reconcile this even
19 though interest rates have come down even further since the last case. Some "healthy"
20 Missouri utilities are currently taking advantage of these lower interest rates and
21 therefore, reducing their cost of debt that will eventually be reflected in rates in their next
22 rate case.

23 Q. What has changed since the last rate case, Case No. ER-2001-672?

1 A. Aquila has encountered financial difficulties because of its failed non-
2 regulated investments. Aquila is in the process of restructuring itself into a regulated,
3 domestic utility. These are the only operations that will be left to possibly allow Aquila
4 to return itself to an investment grade utility company.

5 Q. Has Aquila made any comments that cause you some concern about its
6 motives in any rate increase request that it makes with this Commission?

7 A. Yes. In an April 16, 2003 article in the *Kansas City Star*, reporter
8 Steve Everly stated the following:

> 9 The new focus puts pressure on the financial performance
> 10 of the utilities, which has lagged in the past. Support staff
> 11 for the utilities were laid off last year to cut expenses, and
> 12 Aquila executives said Tuesday that they would be
> 13 **aggressive** in seeking rate increases to raise revenues.

14 Because Aquila's financial condition has changed since its last rate case
15 just a couple of years ago as a result of the failure of its non-regulated investments, I am
16 concerned about such comments. If Aquila felt that the performance of its MPS division
17 was lagging because of Missouri regulation in the last rate case, then I am not sure why
18 they would have agreed to a rate decrease in that case. The only reason I can surmise that
19 Aquila is going to be "aggressive" in pursuing rate increases now is because it now has to
20 rely on its regulated utilities to return it to the financial health that it had before the non-
21 regulated business failures. Clearly, this burden should not be placed on the ratepayers of
22 Missouri. Aquila should only be allowed to recover a cost of capital that would be
23 commensurate with its cost of capital based on the capital structure as of the test year
24 with a cost of common equity that is reflective of the current capital and economic
25 environment.

1 Q. Mr. Reed stated that Staff's recommended common equity ratio of
2 48.51 percent in the last case should be considered as the lower bounds for what is an
3 appropriate common equity ratio in this case. Do you agree?

4 A. No. In the last rate case, Staff's recommended common equity ratio was
5 based on Aquila's actual consolidated capital structure. Although this common equity
6 ratio was higher than Aquila's average common equity ratio in the past, Staff still
7 recommended this common equity ratio in its capital structure recommendation because
8 this common equity ratio reflected the actual amount of common equity in Aquila's
9 capital structure. Even if Aquila is able to return itself to an investment-grade, domestic,
10 regulated utility, based on Aquila's historical capital structures, Staff has no reason to
11 believe that Aquila will actually capitalize its utilities at a 48 percent common equity
12 ratio in the future. This is exactly why I relied on how Aquila was financed in the past,
13 along with the comparable companies' capital structures, to determine if my
14 recommended capital structure as of the test year was appropriate.

15 Q. Mr. Reed discusses the financial markets' general desire for companies
16 that have stronger balance sheets and lower operating risks. What is your general
17 understanding as to why financial markets would like to see stronger balance sheets and
18 lower operating risks in the utility industry?

19 A. It is generally understood that the focus on stronger balance sheets and
20 lower operating risks in the utility industry is a result of the non-regulated activities of
21 utilities that chose to embrace this strategy. Ratepayers should not be expected to
22 strengthen balance sheets of utility companies that experienced significant losses due to

1 non-regulated investments. Ratepayers did not stand to benefit from the gains due to
2 these investments and they should not stand to lose from these investments.

3 Q. Does Mr. Reed contradict any of Aquila's prior positions, including in this
4 case, about the verifiability of the divisional capital structures of MPS and L&P?

5 A. Yes. On page 11, lines 19 through 20 of his rebuttal testimony, Mr. Reed
6 states that: "[a]s divisions of Aquila, Inc. their capital structures are not separately
7 discernible from that of the overall corporation." Mr. Reed's statement confirms my
8 position that the "allocated capital structures" of MPS and L&P are completely fictitious.
9 This is a capital structure process that Aquila has maintained is accurate for ratemaking
10 purposes for the last 15 years in cases before this Commission. Now one of their own
11 witnesses is recognizing the fallacy of the position that it has presented to this
12 Commission in every rate case since Aquila instituted its allocated capital structure
13 process.

14 Q. On page 22 and 23 of his rebuttal testimony, Mr. Reed discusses some of
15 the things that he feels that equity markets are watching very closely for regulated electric
16 utilities, such as the allowed returns in new cases. Do you have any evidence from the
17 popular financial press that indicates that equity investors are expecting lower allowed
18 returns than in the past, which is much of the information that Mr. Reed relies upon to
19 refute the reasonableness of your recommendation in this case?

20 A. Yes. In an article, "Utility Cutbacks Worried States Before Blackout:
21 Rate Freezes Spurred by Deregulation Weighed on Staffing, Maintenance," on
22 August 29, 2003, in the Wall Street Journal, there was a discussion about how frozen
23 rates actually worked in favor of utilities. The article specifically stated that, "The frozen

1 rates actually worked in the utilities' favor, by allowing them to get higher rates of return
2 than would have been authorized in today's low-interest-rate environment. But with rates
3 frozen, the easiest way to get dollars to the bottom line is by whacking expenses."
4 Consequently, the equity markets already recognize that it is likely that commissions are
5 not going to authorize as high of returns for utilities as in the recent past because of the
6 current low-interest-rate environment.

7 Q. Do any of the court cases you cited in your direct testimony confirm that
8 previous recommended rates of return may be too high or low based on different capital
9 and economic environments?

10 A. Yes. This is addressed in the Bluefield Water Works and Improvement
11 Company (1923) case when the court stated the following:

12 A rate of return may be reasonable at one time and become
13 too high or too low by changes affecting opportunities for
14 investment, the money market and business conditions
15 generally.

16 This is why it is important to perform a thorough, objective analysis of the
17 cost of common equity in each rate case that comes before this Commission.

18 Q. On page 29, line 1 through 3 of his rebuttal testimony, Mr. Reed indicates
19 that it is the "end result, not the process" that determines the reasonableness of a rate of
20 return recommendation. What were Staff's overall rate of return recommendations in the
21 recent Empire rate case, Case No. ER-2002-424, AmerenUE complaint case, Case No.
22 EC-2002-1 and the previous MPS rate case, Case No. ER-2001-672?

23 A. Staff's overall rate-of-return recommendation for Empire in its last rate
24 case ranged from 8.27 percent to 8.72 percent. Staff's overall rate of return
25 recommendation in the previous MPS rate case ranged from 8.49 percent to 8.98 percent.

1 Staff's overall recommendation in the AmerenUE complaint case ranged from
2 8.01 percent to 8.61 percent. Staff's overall rate of return recommendation in this case
3 ranges from 7.97 percent to 8.32 percent. Considering the fact that I did not make a
4 downward adjustment to my embedded cost of debt due to various considerations that I
5 have already mentioned, I find this recommendation to be quite reasonable.

6 Q. Does Staff typically consider how its overall rate-of-return
7 recommendation compares to its other rate-of-return recommendations in order to test it
8 for reasonableness?

9 A. No. I am providing the overall rate-of-return recommendation for
10 previous cases because Mr. Reed is focusing on the recommended cost of common equity
11 and the common equity ratio in these cases. Ultimately, it is the rate of return, which is
12 made up of all of the weighted costs of the various forms of capital which includes equity
13 and debt, that gets applied to rate base when calculating a revenue requirement. Some
14 companies may have higher embedded costs of debt than others so when the weighted
15 cost of debt is combined with the weighted cost of common equity recommendation this
16 will increase the overall recommended rate of return.

17 Q. On page 24, lines 16 through 18 of his rebuttal testimony, Mr. Reed
18 indicates that if this Commission adopts Staff's recommendation in this case that capital
19 would "quickly exit Aquila's stock in search of returns that are commensurate with the
20 risks of utility stock ownership." Hasn't this already occurred?

21 A. Yes. The equity capital that was reflected in Aquila's market price per
22 share before its non-regulated losses has since long exited Aquila's stock because the

1 risks of ownership of Aquila's stock was far higher than that of a traditional, regulated
2 utility company's stock.

3 Q. Does Mr. Reed make any comments that cause you concern about the
4 effect that Aquila's failed non-regulated investments will have on the future health of
5 Missouri's utilities?

6 A. Yes. On page 26 of his rebuttal testimony Mr. Reed states the following:

> 7 Of equal importance, Aquila would face restricted access to
> 8 capital markets, and would likely face great difficulty in
> 9 raising new capital for maintenance and expansion of utility
> 10 assets. One only has to look at the financial collapse of
> 11 PG&E, Mirant, NRG, Enron and the energy merchant
> 12 business units of other companies to see how severe the
> 13 consequences can be when a firm's access to capital
> 14 markets is cut off. The electric utilities that have faced
> 15 these challenges have often had to resort to extreme levels
> 16 of spending reductions which inevitably degrade utility
> 17 service and raise rates to consumers for years into the
> 18 future.

19 While Mr. Reed is attempting to support his concern about the effect that
20 he feels Staff's recommendation would have on the Missouri utilities owned by Aquila,
21 he is pointing out some of the real problems Aquila **has already caused** because of its
22 precarious financial situation as a result of non-regulated business failures (emphasis
23 added). If Mr. Reed's concerns should become a reality, then he has just pointed out the
24 detriments to Missouri ratepayers that have resulted from Aquila's failed non-regulated
25 investments, which had nothing to do with Missouri regulation.

26 **<u>Summary and Conclusions</u>**

27 Q. Please summarize the conclusions of your surrebuttal testimony.

28 A. My conclusions regarding the capital structure and cost of common equity
29 are listed below.

1. The use of the capital structures proposed by OPC and Aquila are inappropriate. Neither witness has recognized any short-term debt in their capital structure recommendations. OPC excluded current maturities on long-term debt, which is both inappropriate and inconsistent with even OPC precedent. The calculation of the cost of capital for MPS and L&P should be based on Aquila's actual consolidated capital structure as of December 31, 2002, as shown on Schedule 9 attached to my direct testimony;
2. My cost of common equity stated in Schedule 23 attached to my direct testimony, which is 8.64 percent to 9.64 percent, would produce a fair and reasonable rate of return of 7.97 percent to 8.32 percent for the Missouri jurisdictional electric utility rate base for MPS and L&P.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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Table 2-1

Basic Series: Summary Statistics of Annual Total Returns

from 1926 to 2002

Series	Geometric Mean	Arithmetic Mean	Standard Deviation	Distribution
Large Company Stocks	10.2%	12.2%	20.5%	
Small Company Stocks	12.1	16.9	33.2	*
Long-Term Corporate Bonds	5.9	6.2	8.7	
Long-Term Government	5.5	5.8	9.4	
Intermediate-Term Government	5.4	5.6	5.8	
U.S. Treasury Bills	3.8	3.8	3.2	
Inflation	3.0	3.1	4.4	

–90% 0% 90%

*The 1933 Small Company Stocks Total Return was 142.9 percent.

Schedule 1-2