BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Tariffs of Aquila, Inc, d/b/a) Aquila Networks–MPS and Aquila Networks–) L& P Increasing Electric Rates for the Service) Provided to Customers in the Aquila Networks) MPS and Aquila Networks–L&P Service Areas.)	**Case No. ER-2007-0004** Tariff No. YE-2007-0001

FEDERAL EXECUTIVE AGENCIES'
POST-HEARING BRIEF

COME NOW the Federal Executive Agencies ("FEA") and submit this post-hearing brief in accordance with the Commission's Order in this docket. At this time, the FEA will only address issues that are not subject to the Stipulation and Agreement signed in this docket and that the FEA addressed in its Pre-Hearing Brief.

RATE OF RETURN

1. Return on Common Equity

The determination of the return on common equity represents a significant component in the rate-making process. The result of this process means the determination of a large part of the utility's budget. As this represents the determination of at least a large portion of the utility's budget, it also represents an opportunity to properly fix the motivation of the utility to innovate and engage in smart and sound business practices. This is also a point at which the Commission determines the extent to which the utility profits at the expense of its consumers. That said, the determination of the below rate of return issues should be made with the fiscal

responsibility of the utility and a proper consideration of the consumers' interests in mind.

A. What is the appropriate proxy group to be used in calculating Aquila's return on equity?

As this Commission has previously noted, the determination of return on equity (ROE), while not an exact science, does have certain rules that should be followed in the determination of an ROE to achieve a "just and reasonable" ROE. These rules, as previously articulated by this Commission, include: a return must be equal to that of concerns observed at the same time, that pose or are posed the same risks, and that are in the same, general part of the country. [1] As discussed in the hearing, the *Hope* and *Bluefield* cases have a need-based component, where the rates set are responsive to the revenue requirement for the utility to keep its doors open and have a reasonable opportunity to attract and keep investors. The *Hope* and *Bluefield* tests also have a normative or comparative component. These two parts of the puzzle are reflected in recent Commission decisions that specifically cite to this balance, as articulated to the *Hope* and *Bluefield* line of cases. [2] This *comparative* method, in essence, requires that

[1] A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. *In the Matter of the Tariff Filing of The Empire District Electric Company*, ER-2006-0315, *citing Bluefield Water Works v. Pub. Serv. Comm'n of West Va*, 320 U.S. 591 (1923).

[2] *Empire District Tariff*, ER-2006-0315, citing the *Hope* and *Bluefield* cases, states: The Commission must draw primary guidance in the evaluation of the expert testimony from the Supreme Court's Hope and Bluefield decisions. Pursuant to those decisions, returns for Empire's shareholders must be commensurate with returns in other enterprises with corresponding risks. Just and reasonable rates must include revenue sufficient to cover operating expenses, service debt and pay a dividend commensurate with the risk involved. The language of Hope and Bluefield unmistakably requires a *comparative method*, based on a quantification of risk. Investor expectations of Empire are not the sole determiners of ROE under Hope and Bluefield, we must then compare it to the performance of other companies that are similar to Empire in terms of risk. Hope and Bluefield also expressly refer to objective measures. The allowed return must be sufficient to ensure confidence in the financial integrity of the company in order to maintain its credit and attract necessary capital. By referring to confidence, the Court again emphasized risk. In its decision

the Commission look to the asserted revenue requirements of the utility, in the context of the *normative* valuation according to the national average of like concerns at that given time. [3] The admonition that the national average should not be used "unthinkingly" is not a proscription against using the national average, it is a caution against over-emphasizing its impact on the rate-making decision. [4] As such, it should be a half of the puzzle, as intended by the Court in the *Hope* and *Bluefield* cases.

In recent cases, this Commission has specifically decided to reject testimony on the basis that it does not have a proxy group that is sufficiently representative of the utility that is the subject of the rate-making proceeding. Specifically, this Commission has previously rejected ROE testimony where it did not adequately reflect the utility's size, risk, or general geographic location. [5] Under cross-examination, Dr. Samuel Hadaway admitted that just over one-quarter of the 24 companies in his proxy group were companies squarely in the "central region," the region in which Aquila is situated. [6] In addition, Dr. Hadaway also admits a disparity between Aquila and a number of the companies in his proxy group to attain an "average." [7] In other words, Dr. Hadaway

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in Missouri Gas Energy, the Commission stated that it does not believe that its return on equity finding should "unthinkingly mirror the national average." However, the national average is an indicator of the capital market in which Empire will have to compete for necessary capital. One requirement imposed by Hope and Bluefield is that Empire's rates be sufficient to permit it to obtain necessary capital.

[3] *Id.*
[4] *Id.*
[5] *Kansas City Power and Light Tariff*, ER-2006-0314, stating: "As Dr. Hadaway noted, besides being too small from a statistical standpoint, Mr. Barnes ends up with a flawed sample because it is dominated by companies that are not similar to KCPL. Four of the five companies are in Value Line's West Region: Hawaiian Electric (based in Honolulu, Hawaii); IDACORP (based in Boise, Idaho); Pinnacle West (based in Phoenix, Arizona); and Puget Energy (based in Bellevue, Washington). The other company, Southern Company (based in Atlanta, Georgia), is in Value Line's East Region. Staff's sample does not assist the Commission in determining whether KCPL would have the opportunity to earn a rate of return equal to that ". . . generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties."
[6] *See* Hearing Transcript, pp. 328 – 30.
[7] *See* Hearing Transcript, pp. 316 – 8.

admittedly uses companies in almost three-quarters of his proxy group that are not operating in the same geographic area, so he can develop a group that gives an average ROE that has to be adjusted up to compensate for Aquila's "additional construction risk." [8] On the other hand, Mr. Michael Gorman's proxy group has only two of nine members that operate either largely or exclusively outside of the Central Region of the United States. [9] While Dr. Hadaway's proxy group is larger, the size of the group for statistical purposes, is meaningless if the members of the group are incorrect choices for the purposes of the statistical exercise. The disparity in size, composition, and customer base of the companies in Dr. Hadaway's proxy group is further underscored by his responses to cross-examination by counsel for SIEUA and AG Processing. [10] As a matter of fact, Dr. Hadaway expressly says that the risk posed by the construction program is literally *twice as big as the average construction programs for the comparable companies in the proxy group.* [11] The situation crafted by Dr. Hadaway has the dubious effect of essentially stating that the group of comparators that is so similar in size under the *Hope* and *Bluefield* requirements, that a "construction adder" of 25 to 50 basis points to account for a perceived additional risk is necessary. This begs the observation that Dr. Hadaway and the utility have to admit one or the other as the truth at play in this rate-making process: either the proxy group is sufficiently representative under *Hope* and *Bluefield,* and the proposed "construction adder" is superfluous, or it is not, and the construction adder is legitimate to make up for the difference. In addition, Dr. Hadaway admitted during cross-examination that his proxy group had not been updated in time to account for some significant changes in his proxy group that would effectively

[8] *See* Hearing Transcript, pp. 316 – 8.
[9] Gorman Direct, Schedule MPG-4.
[10] *See* Hearing Transcript, pp. 364 – 73.
[11] *See* Hearing Transcript, p. 315.

serve to skew his results. [12] This is in addition to the admitted dissimilarities in the proxy group and Aquila, as noted above.

Mr. Michael Gorman selected a proxy group that approximates Aquila's Missouri utility investment risk based on the following criteria: 1) S&P bond rating in the category of "A" and "BBB", 2) Moody's bond rating within the categories of "Baa" and "A", 3) common equity ratio within the range of 40% to 60%, 4) S&P business profile score of 4 to 6, 5) consensus analysts growth rates available, 6) no significant merger or acquisition activity, 7) no dividend suspension within the last two years, and 8) no restructuring. [13]

Mr. Gorman demonstrated that his proxy group was a reasonable risk proxy for Aquila. As noted above and in Mr. Gorman's Schedule MPG-4, this group has an average bond rating from S&P and Moody's of BBB and Baa1. [14] The group members have a common equity ratio of 50% from Value Line, and a common equity ratio of 46% from AUS Utility Reports. These risk factors are reasonably comparable to Aquila's target investment grade bond rating, its proposed hypothetical capital structure, its target S&P business profile score of 6, and contains a 47.5% common equity ratio. Finally, the group average S&P business profile score is 5. Selecting a group that meets Aquila's target risk parameters is consistent with protecting the Missouri retail customers from Aquila's restructuring efforts as outlined by Aquila witness Mr. Jon Empson. This proxy group accommodates that objective. [15]

As noted above, the selection criteria resulted in a proxy group that reasonably reflects a minimum investment grade utility company, with approximately average

[12] *See* Hearing Transcript, pp. 356 – 66, pp. 416 – 7.
[13] Gorman Direct, p. 19.
[14] Gorman Direct, Schedule MPG-4.
[15] Gorman Direct, pp. 18 – 9.

business risk and financial risk as estimated from S&P business profile scores and the common equity ratios. [16] S&P estimates that most integrated electric utility companies, like Aquila's Missouri utility operations, have business profile scores in the range of 4 to 6.2. Therefore, the proxy group represents an average operating business risk for integrated electric utility companies. [17]

Mr. Gorman explained that the selection of an appropriate proxy risk group would allow for an estimate of a fair return for Aquila's risk, including its small size risk. Mr. Gorman explained that the companies that were selected were comparable to Aquila in total investment risk. Part of Aquila's investment risk relates to its small capitalization size. By selecting companies that have similar total investment risk to Aquila, the proxy group can be used to estimate a fair rate of return to compensate investors in utility companies with Aquila's investment risk characteristics. [18]

Mr. Gorman explained that a company's size would impact its operating risk in the following ways:

1. Small companies typically have less ability to attract qualified management pools. [19]
2. Small companies usually do not have the economies of scale to minimize operating expenses by spreading expertise over a larger customer base and buying materials and supplies in larger quantities.
3. Small companies do not have the geographic diversification to mitigate sales variations caused by weather and local economic cycles.

These small company risk factors are considered by credit rating analysts and security analysts in assessing a utility's investment risk and valuation. Therefore, when selecting a group of comparable risk companies, if one relies on a group of companies with bond ratings that are comparable to the proxy company and business profile scores in

[16] Gorman Direct, p. 19.
[17] Gorman Direct, pp. 19 – 20.
[18] Gorman Rebuttal, p. 5.
[19] Gorman Rebuttal, p. 5.

particular, that reasonably compare to the utility's business profile score, then the proxy group itself would reflect these risk factors. Under these circumstances, it is unreasonable and would be redundant to add an equity risk premium to a proxy group return if that proxy group already reasonably captures Aquila's total investment risk. [20]

B. What is the appropriate model (discounted cash flow, capital asset pricing model, risk premium) to be used in estimating Aquila's return on equity?

This Commission has acknowledged the fact that the *Hope* and *Bluefield* case line, while it does not require adherence to a particular formula, does require that at least some attention be paid to the results of the formula in determining which or what formula or model leads to a reasonable result. [21] Dr. Hadaway's rejection of one of the DCF models, where it gives lower ROE results and where the DCF models are preferred, does not lead to a reasonable result. [22] Mr. Gorman relied on three models: DCF, risk premium, and CAPM, to estimate a fair return for Aquila. Any single model could produce unreasonable results based on varying market and industry conditions. Therefore, Mr. Gorman's reliance on the three models to produce a broad based analysis

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[20] Gorman Rebuttal, p. 6.

[21] *Kansas City Power and Light Tariff,* ER-2006-0314. The Commission's decision notes: "In the final analysis, it is not the method employed, but the result reached, that is important. The Constitution "does not bind ratemaking bodies to the service of any single formula or combination of formulas." *See also State ex rel Missouri Gas Energy,* 186 S.W.2d 376, 384 – 5 (Mo Ct App, December 27, 2005), which states: "The Court refined this standard further in *Hope,* noting that public-utility commissions are "not bound to the use of any single formula or combination of formulae in determining rates," and that ratemaking "involves the making of 'pragmatic adjustments.'" 320 U.S. at 602 (citation omitted). According to the Supreme Court, under the "just and reasonable" standard "it is the result reached not the method employed which is controlling." *Id.* Further, "it is not theory but the impact of the rate order which counts. *If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end.* The fact that the method employed to reach that result may contain infirmities is not then important." *Id.,* (emphasis added).

[22] Hearing Transcript, pp 320 – 1.

to draw upon market and industry information gives a reasonable estimate of a fair return for Aquila. [23]

C. In the event that the Commission decides to utilize a DCF model for estimating return on equity, should the Commission utilize a constant growth or multistage DCF model?

The Commission should adopt the constant growth model. The results of the constant growth DCF analysis in general in today's marketplace, reflect rational investment financial metrics and reflect today's very low cost capital market. [24] The DCF model is the model used most widely throughout the electric utility industry. [25] The use of the DCF model is also reflected in the fact that the Federal Energy Regulatory Commission uses the DCF model as their preferred methodology. [26]

D. For any DCF model, what is the appropriate growth rate?

The appropriate growth rate to be used in the DCF model, in this instance, is 5.33%. The consensus analysts' growth rate for Mr. Gorman's comparable groups is 5.33% and for Dr. Hadaway's group is 5.16%. [27] The appropriate growth rate to use in a DCF model is one that captures rational consensus market expectations. Security analysts' three to five-year projected growth rates are the most likely growth rate that reflects current investor expectations. [28]

On the other hand, Dr. Hadaway relied on an excessive growth rate that is not reflective of investor expectations. Dr. Hadaway used a GDP growth rate of 6.6% as one of three growth rates. He states that the GDP growth rate is based on the achieved GDP growth over the last 10, 20, 30 and 40-year periods. Dr. Hadaway's projected GDP

[23] *See Generally* Gorman Direct, pp. 20 – 35, Gorman Rebuttal, pp. 8 – 14.
[24] Gorman Direct, p. 23.
[25] Hearing Transcript, p 321.
[26] Hearing Transcript, pp 469 – 73.
[27] Gorman Direct, p. 23.
[28] Gorman Direct, p. 22 – 4.

growth rate is unreasonable. Historical GDP growth over the last 20 and 40-year periods was strongly influenced by the actual inflation rate experienced over that time period.[29] Projected GDP inflation is much lower than the historical inflation used by Dr. Hadaway in his GDP estimate. Dr. Hadaway's nominal GDP inflation factor of 6.6% reflects a real GDP of 3.2% and an inflation GDP of 3.3%. Current economists' projections of nominal GDP include real GDP and GDP inflation expectations over the next five and ten years of 3.0%, and 2.1%, respectively. [30] Dr. Hadaway's historical GDP reflects historical inflation, which is much higher than expected forward-looking inflation. Dr. Hadaway's 6.6% nominal GDP growth is not reflective of consensus market participant expectations. [31]

E. In the event that the Commission decides to utilize a risk premium model for estimating a return on equity, what is the appropriate premium to account for the difference in risk between equity and bondholders?

The appropriate premium to account for the difference in risk between equity and bondholders should 3.7% and 5.2% for utility bonds and Treasury bonds, respectively. [32] A risk premium should be selected based on the relative investment risk difference between equity investments and bond investments. Risk premiums do not fluctuate based on nominal changes to interest rates alone. The academic literature clearly supports the concept that risk premiums will expand when the risk of equity investment increases relative to bond investments, and will contract when equity risk declines in relationship to bond investment risk. This risk return relationship is not changed

[29] Gorman Rebuttal, p. 8.
[30] Gorman Rebuttal, p. 9.
[31] Gorman Rebuttal, p. 9.
[32] Gorman Direct, p. 28.

merely by changes to nominal interest, but changes in nominal interest rates can be a factor that impacts risk. [33]

In constructing his risk premium study, Mr. Gorman relied on the spread between utility bonds and Treasury bonds as a proxy for estimating the relative risk differential between utility equity investments and bond investments. This analysis indicates that equity risk premiums for utility equity investments are not higher relative to historical actual risk premiums. This finding is consistent with a review of the industry that has been mitigating risks by reverting back to low risk utility operations. [34]

F. In the event the Commission decides to utilize a risk premium model for estimating return on equity, what is the appropriate interest rate for utility bonds?

Relying on both current observable interest rates and projected interest rates, for the near future, is the appropriate interest rate to use in an equity risk premium study. Future interest rates are highly uncertain and there is no reasonable method for accurately determining what future interest rates will be. Indeed, current observable interest rates are just as likely to be the prevailing interest rates once rates determined in this proceeding are in effect, as are economists' projections of future interest rates. [35]

For these reasons, Mr. Gorman relied on both current observable interest rates and projected interest rates in formulating his recommended return on equity in this proceeding. In contrast, the Company relied only on projected interest rates, which were significantly higher than current observable interest rates. This is inappropriate because, again, interest rate projection accuracy is at best problematic, and serves only to unnecessarily increase the authorized return on equity in this proceeding. For this

[33] Gorman Rebuttal, pp. 10 – 5.
[34] Gorman Direct, pp. 26 – 7.
[35] Gorman Direct, pp. 26 – 7, Gorman Rebuttal, p. 11.

reason, the Company's reliance on only projected interest rates is ignoring relevant information to determine what future interest rates might be and thus overstates Aquila's cost of equity in this proceeding. [36]

G. Is an equity add-on appropriate to account for Aquila's construction risk and small company nature?

No. The proposed equity add-on of 25 basis points is meritless and should be rejected out-of-hand. The justification for this add-on is a perception (on the part of Dr. Hadaway) that Aquila poses greater investment risk because of greater construction risk and due to the fact that it is a small utility. [37] As noted in subparagraph (A), above, the proxy group consists utilities of the same general size, and pose the same investment risks, as Aquila. Aquila's size is just a factor that describes its investment risk. Therefore, any such proposed add-on is superfluous and should be denied on that basis.

H. What is the appropriate return on equity to use in calculating cost of service?

The Commission should award MPS and L&P a return on common equity of 10.0%. This recommended return on equity for Aquila is based on an average of the constant growth Discounted Cash Flow ("DCF"), Risk Premium ("RP") and Capital Asset Pricing Model ("CAPM") analyses noted in Mr. Gorman's testimony. These analyses estimate a fair return on equity based on observable market information for a group of publicly traded electric utility companies that proxy Aquila's going forward investment risk. [38]

In general, determining a fair cost of common equity for a regulated utility has been framed by two decisions of the U.S. Supreme Court: *Bluefield Water Works &*

[36] Gorman Rebuttal, pp. 11 – 2.
[37] Gorman Rebuttal, pp. 1 – 2.
[38] Gorman Direct, p. 2.

Improvement Co. v. Public Serv. Comm'n of West Virginia, 26 U.S. 679 (1923) and *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards are that the authorized return should: (1) be sufficient to maintain financial integrity; (2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk. This Commission has acknowledged that Missouri state law reflects this premise while noting a further step that builds in protections for the interests of the consumers. [39] The rates set should be "just and reasonable" to the extent that they allow for the utility to carry on its operations and provide investors a reasonable return. [40] The setting of "just and reasonable rates" must also be examined in the context of the Commission's "guiding purpose," which is the protection of the consumers, not the utilities. [41] The above decisions, which are representative of the state of the law in the matter of setting return on equity, do not contemplate the inclusion of inflated analyses, "padding" that serves to insulate utilities from every conceivable eventuality, or the granting of the ability for the utility to instantly rise "head and shoulders" above comparators as an assured investment risk at the expense of the consumers. Any such consideration for the utility is beyond the scope of what the law allows and does not comport with the Commission's "guiding purpose":

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[39] *See In the Matter of the Tariff Filing of The Empire District Electric Company*, ER-2006-0315.
[40] *In the Matter of the Tariff Filing of The Empire District Electric Company* provides: A "just and reasonable" rate is one that is fair to both the utility and its customers; it is no more than is sufficient to "keep public utility plants in proper repair for effective public service, [and] . . . to insure to the investors a reasonable return upon funds invested."
[41] *In the Matter of the Tariff Filing of The Empire District Electric Company* further provides:"The Commission's guiding purpose in setting rates is to protect the consumer against the natural monopoly of the public utility, generally the sole provider of a public necessity. "[T]he dominant thought and purpose of the policy is the protection of the public . . . [and] the protection given the utility is merely incidental."

the protection of the consumers (as opposed to the protection of the utilities at the expense of the consumers).

As noted above, the "normative" effect of the national average for ROE's is just as much a part of the puzzle as the determination of the utility's revenue requirement. This Commission has previously addressed this fact in recent, similar cases. [42] As a matter of fact, this Commission has specifically rejected ROE analyses that are "out of sync with the national average." [43] In addition, the revenues set by the ROE determination are not accomplished with a mind towards making the utilities particularly profitable or to guarantee net revenues for the business concern. [44] In fact, the use of rate-making as a means of curbing risk and improving the credit standings of a utility is a dubious prospect, where there is not a strict "cause and effect relationship" and there are a

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[42] *In the Matter of the Tariff Filing of The Empire District Electric Company*, ER-2006-0315, provides: "The Commission must draw primary guidance in the evaluation of the expert testimony from the Supreme Court's Hope and Bluefield decisions. Pursuant to those decisions, returns for Empire's shareholders must be commensurate with returns in other enterprises with corresponding risks. Just and reasonable rates must include revenue sufficient to cover operating expenses, service debt and pay a dividend commensurate with the risk involved. The language of Hope and Bluefield unmistakably requires a *comparative method*, based on a quantification of risk. Investor expectations of Empire are not the sole determiners of ROE under Hope and Bluefield, we must then compare it to the performance of other companies that are similar to Empire in terms of risk . . . In its decision in Missouri Gas Energy, the Commission stated that it does not believe that its return on equity finding should "unthinkingly mirror the national average." However, the national average is an indicator of the capital market in which Empire will have to compete for necessary capital.

[43] *Kansas City Power and Light Tariff*, ER-2006-0314. The Commission, in the KCP&L case, rejected an ROE calculation significantly lower than the national average, stating: Moreover, in direct conflict with this Commission's "zone of reasonableness" decisions in MGE and Empire, he would have the Commission ignore other jurisdictions' findings on ROE. Again, while the Commission will not "unthinkingly mirror the national average" in this case, the Commission finds that it is simply common sense to use national average ROEs as a reference point because that gives the Commission insight about the capital market in which KCPL must compete for equity dollars." The analysis that a substantially low figure should also extend to high figures, especially in light of the obligations to the consumer (as opposed to the utilities) that the Commission has.

[44] *Empire District Electric Company Tariff*, ER-2006-0315. The Commission states: "A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures." The Commission also states, in *Kansas City Power and Light Tariff*, ER-2006-0314, that: "[R]egulation does not insure that the business shall produce net revenues."

number of other, intervening causes at play in the mix. [45] The limit on returns from ROE's set by the rate-making process has also been addressed by this Commission in terms of the object of the rate-making process: sufficiency to attract capital and to assure confidence in the enterprise's financial integrity. [46] The United States Supreme Court, in its decision in *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U.S. 575, 585 – 6 (1942), noted that Commissions, where they set ROEs for utilities, should set the rate at the "lowest reasonable rate." [47]

Mr. Gorman's recommended return on equity of 10.0% is at the mid-point of the estimated return on equity range for Aquila of 9.4% to 10.6%. [48], [49] The high end of the estimated range is based on the figure derived from the CAPM analysis, and the low end of the estimated range is based on the figure derived from the constant growth DCF analysis. The midpoint of that estimated range is 10.0%. Using Dr. Hadaway's proxy group, as appropriately adjusted, would indicate a return on equity in the range of 9.5% to 10.6%. The high end of that estimated range is based on a CAPM return using Dr. Hadaway's proxy group, the low end is based on a DCF study using Dr. Hadaway's group. The midpoint of that estimated range is 10.0%. Based on this assessment, the recommended return on equity will fall within the overall range of 9.8% to 10.0%. As a

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[45] Hearing Transcript, pp 513 – 5.

[46] The Missouri State Court of Appeals, in *State ex rel Missouri Gas Energy*, 186 S.W.3d 376, 383 (Mo Ct App, 2006) states that: "A rate of return is generally considered to be fair if it "covers utility operating expenses, debt service, and dividends, if it compensates investors for the risks of investment, and if it is sufficient to attract capital and assure confidence in the enterprise's financial integrity." Assoc. Nat. Gas Co., 706 S.W.2d at 875 (citation and internal quotations omitted). That said, "the rate of return should not be higher than is necessary to achieve these goals."

[47] *Federal Power Commission v. Natural Gas Pipeline Co.*, 315 U.S. 575, 585 – 6 (1942). The Court noted: "By long standing usage in the field of rate regulation, the "lowest reasonable rate" is one which is not confiscatory in the constitutional sense . . . Assuming that there is a zone of reasonableness within which the Commission is free to fix a rate varying in amount and higher than a confiscatory rate, the Commission is also free under § 5 (a) to decrease any rate which is not the "lowest reasonable rate." This case has regularly been cited by the Commission in electric utility cases, as late as 2006.

[48] Gorman Direct, p. 34.

[49] Hearing Transcript, pp 527 – 8.

conservative estimate, the Commission should set Aquila's rates based on a 10.0% return on equity. This figure reflects Dr. Hadaway's proxy group and it is higher than is reasonable, based on a more reasonable assessment of proxy companies reasonably comparable in risk to a typical integrated utility company with a minimum investment grade bond rating. [50] In addition, Mr. Gorman's calculations take into account both the limited financial isolation of Aquila's Missouri operations and the additional construction risk posed to Aquila, which Dr. Hadaway feels compelled to "tweak" outside his basic calculations. [51]

FUEL COST RECOVERY MECHANISM

The formulation of the fuel cost mechanism, where appropriate in this case, is a significant step for this Commission. First and foremost, this case represents an early attempt to use a new tool placed at the Commission's disposal by the Missouri State Legislature. This represents one of the first attempts to set a significant new policy for the State of Missouri. Secondly, the determination of the structure and use of the fuel cost recovery mechanism also represents the point at which the responsibilities and relative risks between the utility and its customers are put into place under a new regulatory regime. There is one question that should be kept in mind throughout the consideration of this issue: what makes sense in the context of the ultimate customer of both the utility and the Commission, the consumer? Does it make sense to make proper and well-established use of the profit motive, as a key part of the capitalist economy, to keep the relationship functioning, or should the Commission decide to place all of the

[50] Gorman Direct, p. 35.
[51] Hearing Transcript, pp 527 – 30, 533 – 5.

risk and burden into the laps of the parties least able to control the operations of the utility: the consumers?

1. What is the appropriate mechanism (base rates, interim energy charge, fuel adjustment clause ("FAC") to be implemented by Aquila for the recovery of fuel and purchased power expense?

The appropriate mechanism for recovery of fuel and purchased power expenses is situation-dependent. Movement between base rates, an interim energy charge, and a fuel adjustment clause is hierarchical and is dependent on need. The recovery through base rates, where it includes the optimal protections and advantages for consumers, is the optimal answer for the ultimate beneficiary of these proceedings: the consumer. [52] Movement to an interim energy charge, then a fuel adjustment clause as a means of recovery of fuel and purchased power expenses, should be based on an "acute need." [53] Only upon establishment of this "acute need," should the utility be able to recover the costs via a fuel adjustment clause. [54] The mere fact that fuel costs fluctuate (a long-standing reality of the utility industry) does not justify the use of a fuel adjustment clause, which effectively denies consumers many of the regulatory protections they would enjoy under more traditional and conservative fuel recovery mechanisms. [55] While the holding in *State ex rel Utility Consumers Council of Missouri* is no longer the law of the State of Missouri, where a Rate Adjustment Mechanism is allowed by operation of Missouri State statute, the dictum is still instructive as to the dangers posed by such Rate Adjustment Mechanisms (RAM), particularly a Fuel Adjustment Clause

[52] Johnstone Direct (1/18/07), pp. 9 – 10.
[53] Johnstone Rebuttal, pp. 9 – 10.
[54] Johnstone Rebuttal, pp. 9 – 10.

[55] Johnstone Rebuttal, p. 10; Johnstone Direct (1/25/07), p. 8.

(FAC). [56] These dangers include: the abdication of the rate-making function through a process that allows for diminished or even minimal Commission oversight, allows for compensation for spikes in fuel prices without regard for the compensating effects of the normal economic trends, diminishes the utility's economic incentive to keep fuel costs down where such costs are automatically passed on to the consumers, and that it passes the burden of proving reasonableness or unreasonableness in fuel purchase choices from the utility to the consumer. [57] Aquila witness, Mr. Dennis Williams admits that the prudence review process, attached to the FAC proposal, has the impact of shifting price risks and costs from the utility to the ratepayer. [58] While the law has changed, the policy considerations behind RAMs have not. Therefore the dictum in *State ex rel Utility Consumers Council* is still very relevant, even if the holding is not.

In this proceeding, the Commission should keep in mind that the current rate-making system works, even if it does not give the utility the "immediate gratification" it desires. As one company witness notes, rates are traditionally set using actual costs incurred in a test year, with true-ups incorporated to adjust for costs closer to the time that rates go into effect. By the time rates go into effect, the fuel costs may have *increased or decreased dramatically*. On one hand, the utility may have to file for

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[56] R.S.Mo., § 386.266 (2007).

[57] *State ex rel Utility Consumers Council of Missouri*, 585 S.W.2d 41, (Mo 1979). The principal objections have been that to permit such automatic adjustments would be an abdication of the commission's rate making function; that it would violate the spirit and purpose of regulatory law; that it allows an increase in rates without consideration of all factors, thus overweighing the effect of one factor, and ignoring compensating economies; that it shifts the burden of proving reasonableness or unreasonableness from the utility to the consumer; that it violates the principle that utility rates should be definite and published in order to insure stability and notice of rates to consumers and in order that consumers understand their rates and thus have the knowledge necessary to determine if complaint is warranted; that utilities would lose any incentive to keep down fuel costs where they know such costs can be fully and automatically passed on to the consumer; and that presence of a fuel adjustment clause may bias selection of fuels or production methods so that the utility will chose the method which allows it to pass on the most cost and is thus cheapest to it, rather than the method which is cheapest overall.

[58] Hearing Transcript, pp 620 – 1.

relief, however, on the other hand, the consumers may also have to file for a rate reduction via complaint. The more altruistic reason the company gives is that a FAC will free up time for the utility and staff to "pursue other tasks." [59] It is important to note, at this point, that this notion does not comport with the admission by Dennis Williams, noted below, that there will be a situation giving rise to significant difference of opinion over the prudency reviews or the difficulties with prudency reviews noted by witness Brockway, below. In response to a question as to whether general rate increase cases result in rate increases, Dennis Williams responded that the "normal" result would be a rate increase. As a matter of fact, Williams concedes that there is a "relatively small percentage" of such rate cases that do not result in rate increases. [60] Williams further concedes that the typical result of a rate case is putting more money in the utility's pocket. [61] Interim rate relief is also available for utilities facing dramatic fuel cost increases and that such relief has very probably been granted in the past by the Commission. [62]

The practical result of traditional rate-making, in the face of substantial increases in fuel costs over a relatively short period of time, is to use ingenuity to find ways to keep costs down. If the utility operates under a FAC, with a pure flow-through, then that drive to increase efficiency does not exist. The practical result is a direct pass-through of costs to the consumers, where the utility now has no real incentive or risk involved to encourage optimal economic behavior. [63] The incentives built into traditional rate-making, even those imposed by regulatory lag, encourage better performance through

[59] Hearing Transcript, pp 610 – 1.
[60] Hearing Transcript, pp 626 – 7.
[61] Hearing Transcript, p 628.
[62] Hearing Transcript, pp 648 – 9.
[63] Hearing Transcript, pp 844 – 5.

ingenuity and hard work. [64] The utility's witness even admits that regulatory lag, as that which occurs under traditional rate-making, serves as an incentive for the utility to engage in economically optimal behavior. Williams further admits that this incentive, via regulatory lag would be lost, to be replaced by whatever incentives the FAC prudence review poses. [65]

On the other hand, Ms. Nancy Brockway's personal experience with FACs, as a Commissioner, a Commission Staff member, and as a practicing attorney, was that the after-the-fact prudence reviews were hobbled by an inability to "get to the bottom" of the issue at hand and a built-in inability to pass a finding of imprudence that would stand up in court. In addition, the administration of the FACs, in Ms. Brockway's experience, became a "rote" accounting process that was enmeshed in politics. The decrease of incentive to act prudently is inherent in the FAC proposal. It reflects human nature. It takes a lot of work to operate a utility and to satisfy the fuel requirements. In the case where there is a total pass through of the overage fuel costs, the utility simply does not have the incentive to continue to fight, where they don't have to be within budget to recover costs. [66] In the end, the existence of a FAC became one of the reasons for the later introduction of utility deregulation in the State of New Hampshire. [67] Mr. Steven Fetter (as a former Commissioner for the State of Michigan, testifying as a witness for the company) cannot recall examples of prudence adjustments working. Mr. Fetter further notes that prudence is a give-and-take between parties, and, where there is no cooperation before-hand, there is the potential for significant conflict over

[64] Hearing Transcript, pp 743 – 4.
[65] Hearing Transcript, p 633.
[66] Hearing Transcript, p 715.
[67] Hearing Transcript, pp 847 – 8.

prudence of decisions after the fact. [68] The root of this potential conflict is further reflected where one company witness even states that he believes that there could be two "prudent" choices for a given question and that the parties might differ as to which is the better or more prudent choice. [69] This is the root of the prudence conflict and, essentially, an admission that there is an outstanding possibility of a real "shooting match" and intense litigation over prudence issues in the future under a FAC. In addition to the significant potential for litigation over "prudence," the process itself would become difficult. One Commission Staff witness noted that prudency reviews probably will not have proper access to the information necessary to make informed decisions. The incentives in prudency reviews encourage "foot dragging," where the utility already has the money and would not be inclined to simply give it back. [70] Witness Brockway, based on her personal experience with prudency reviews, notes the fact that a Commission Staff would have to plus up their audit division to go through the utility's books in order to do a proper audit pursuant to a prudence review. Couple this with the difficulties that inherently face after-the-fact prudence reviews, and the picture of a process that is difficult to work is clear. [71]

A means of mitigating the risk inherent in the FAC process is the "sharing" feature in the alternative FAC proposal which provides what is termed "skin in the game." This harkens back to the "invisible hand" ("the invisible hand" of the market, which ensures that those activities most beneficial and efficient will naturally be those that are most profitable) posited by Adam Smith in *The Wealth of Nations.* The economic system responds to the profit motive and is built around it. The 100% flow

[68] Hearing Transcript, pp 587 – 8.
[69] Hearing Transcript, pp 652 – 3.
[70] Hearing Transcript, pp 744 – 5.
[71] Hearing Transcript, pp 880 – 3.

through FAC operates under the premise that this profit motive does not exist and/or is no longer viable. The far better, and more workable, regulatory system is that which takes advantage of this profit motive and the attached incentives to regulate utilities. [72] Ms. Nancy Brockway, as a former Commissioner who has dealt with the administration of FACs, notes that the industrials' "alternative proposed FAC" is superior to the 100% flow through proposed by the utility, because it provides incentives for the utilities to engage in optimal economic behavior where the utility's FAC proposal does not. [73]

As a bottom line, the consideration of a RAM given the policy considerations noted above, requires very careful consideration. The advantage given the utility by the RAM, especially a FAC, poses a significant disadvantage to consumers as to their cost, risk, and protection in an economic transaction with a regulated monopoly.

2. What standard should be utilized by the Commission in determining whether a utility should be granted a FAC?

One very important fact that seems to have been lost in this proceeding is the fact that a RAM (especially a FAC) is an adjunct to rate-making, not a substitute for setting energy costs via the traditional rate-making process. This is reflected in the provisions of Section 386.266 of the Revised Missouri Statutes, where the RAM is a secondary process *outside* of general or normal rate proceedings. [74] This status as an adjunct is similarly reflected in the provisions of Missouri Code of Regulations concerning RAMs

[72] Hearing Transcript, p 890.
[73] Hearing Transcript, pp 851 – 2.
[74] R.S.Mo,, § 386.286. Subsection (b) specifically provides: "Subject to the requirements of this section, any electrical, gas, or water corporation may make an application to the commission to approve rate schedules *authorizing periodic rate adjustments outside of general rate proceedings* to reflect increases and decreases in its prudently incurred costs, whether capital or expense, to comply with any federal, state, or local environmental law, regulation, or rule."

and their use and implementation. [75] As stated before, any utility including Aquila should be granted a fuel adjustment clause based on the establishment of an "acute need." At this stage, where policy is being set, the FEA respectfully assert that the standard should not simply be set at "need" or "significant need." Both have the effect of lowering the bar concerning the use of a RAM or FAC to a level that is instantly provable. Therefore, the operative standard should be an "acute need," that is a need that reflects a critical financial situation for the utility. [76] This is because a fuel adjustment clause (in pure form) automatically flows fluctuating costs, unmitigated, through to consumers. Retail utility rates are then made volatile and inure to the detriment of consumers. Therefore, Aquila, before shifting this cost burden to consumers, should first be required to demonstrate an acute need (therefore pass a higher bar of proof than simple "need" or "significant need" to get the benefits of the RAM or FAC) and then that need must be weighed against the negative effects of the proposed FAC on the consumers. [77] Further, given the risks to the consumers posed by the FAC, the structuring of the FAC should encourage its use by the utility only where necessary. Any encouragement of the use of the FAC, beyond absolute necessity, needlessly and incorrectly places consumers at the greatest risk, where they are the party least able to control the circumstances.

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[75] 4 CSR 240-3.161 and 4 CSR 240-20-090 provide: "Fuel adjustment clause (FAC) means a *mechanism established in a general rate proceeding that allows periodic rate adjustments, outside a general rate proceeding,* to reflect increases and decreases in an electric utility's prudently incurred fuel and purchased power costs."

[76] The FEA further respectfully submit that this acute or critical need is such that requires the intervening effect of a RAM or FAC in order to prevent imminent negative financial impacts on the utility, given current economic conditions and/or the financial condition of the utility. This standard, in other words, should not allow for instant gratification for utilities that simply want to improve their financial condition *faster*. Definitions in this discussion were taken from the entries in *Webster's Ninth New Collegiate Dictionary*, 1986.

[77] Johnstone Direct (1/18/2007), p. 3.

Hearing testimony provided a good historical perspective for when the needs are "acute enough" to justify the potential hazards posed by a FAC. Ms. Brockway recalls that the oil crisis of the 1970's [which was at least coincident with the increased use of FACs] saw "gasoline prices practically tripling overnight and doing that twice within a decade." Oil prices were projected, at that point in time, to go up to $100.00 per barrel, with no end in sight. These are appropriate circumstances for the use of a FAC, in order to protect the utilities against such extreme spikes. However, the normal pattern of ebbs and flows allow for decreases in price correct any short-falls the utility may have incurred during "spikes." Only during such periods of "extraordinary increases," does the use of an FAC to protect the utilities make sense. [78] Based on her observation of the market, Ms. Brockway has observed over the past two decades that prices have gone up and down, and there have been times that the utilities have "done well relative to the expectations that were embedded in the rates that were set in the prior period." [79] The normal fluctuation of fuel prices over the past two decades, even taking into account the "spike" caused by the 2005 hurricane season, does not rise to the level that justifies the implementation and use of a RAM (especially a FAC), as underscored by the historical perspective noted above.

3. In the event that the Commission implements a fuel adjustment clause, what level of sharing between the ratepayers and the shareholders should be reflected in the FAC?

The level of sharing that would optimally balance the interests of the utility and the consumers is a 50 / 50 split. In order to incentivize optimal economic behavior on the part of utilities, the fuel adjustment clause must continue the base rate treatment for

[78] Hearing Transcript, p 862.
[79] Hearing Transcript, pp 877 – 8.

a portion of the fuel costs. The most straight-forward and workable example is a design that provides a fuel adjustment clause for 50% of the fuel costs and continues base rate treatment for the other 50%. The mechanism has the same simplicity of a fuel adjustment clause that would pass through all fuel costs, but would address any incentive problem on the part of the utility by retaining half of the fuel costs in base rates with the effect of changes to accrue to the utility between rate cases. Optimization of the interests of both the utility and the consumers would continue because *both* Aquila and its ratepayers would continue to be better off if fuel and purchased power costs are minimized. [80] This is bolstered by the fact that previous Missouri Public Service Commission decisions have noted that there is no substitute for economic motivation, where a proposed adjustment mechanism prospectively allows for adjustment. [81]

4. Should any FAC provide for the recovery of demand costs?

As a matter of policy, a fuel adjustment clause should never provide for recovery of demand costs. First, demand costs do not fluctuate as much or as dramatically as energy costs, that are more properly contemplated under a fuel adjustment clause. Second, the inclusion of such costs permits the passing of additional costs through to the consumer via a process that that imparts far less scrutiny than would be the case for

[80] Johnstone Direct (1/25/2007). p. 10.

[81] The Commission's decision in *In the Matter of Missouri Gas Energy's Tariff* (GR-2004-0209) provides: Furthermore, the creation of a pre-funded source for the payment of these cleanup costs would remove much of Southern Union's incentive to ensure that only prudently incurred and necessary costs are paid. If the money has already been recovered from ratepayers and is being held in the Fund, Southern Union would have little incentive to not pay it out to settle claims brought against it. The Fund would be subject to audit by Staff and Public Counsel and they could seek a prudence adjustment if necessary. But the need for a prudence adjustment is difficult to prove and is not a good substitute for the company's own desire to prudently minimize its costs to improve its bottom line. For these reasons, the Commission finds that MGE's proposal to create an Environmental Response Fund should be rejected. While the situation is not identical to the present set of circumstances, the principle is the same: "prudence" as a basis for review of economic decisions after the fact is not a substitute for economic motivation for the same behavior.

base rate examination. *See generally* Louisiana Public Service Commission General Order, dated 11/6/1997. [82]

5. What level of line losses should be applied to any FAC?

Line loss factors should be accounted for by rate class and voltage level of service. This will allow for an appropriate distinction and apportionment of costs among rate classes and voltage levels of service. [83]

6. What accumulation period should be used in the FAC?

The accumulation period (three months, as proposed by Aquila) should be extended to six months. This extension would allow for increased rate stabilization via an averaging of highs and lows in cost over the longer accumulation period. [84]

7. What recovery period should be used in the FAC?

The recovery period should be set at twelve months. Aquila has proposed three-month recovery periods. This, in effect, would cause summer costs to collected in winter and winter costs would be collected the following summer. The same would hold true with respect to spring and fall. Since there can be significant differences in retail kilowatt hour sales between these four periods of the year, the effect of volatility in costs can be magnified if there is a large variation in one period and the variations are collected in a the period with fewer kilowatt hour sales. The twelve-month recovery period would have the beneficial effect of spreading out cost variations over a slightly longer period, thereby mitigating the rate impacts on consumers. Cost variations would also not be moved from one season to another, instead they would be spread over a

[82] Louisiana Public Service Commission General Order, Docket No. U-21497, dated 6 November 1997.
[83] Johnstone Rebuttal, p. 26.
[84] Johnstone Rebuttal, p. 22.

twelve-month period. The consistent application of this approach would minimize any unintended shifting of cost between or among customer classes. [85] Witness for Aquila, Mr. Dennis Williams states that he has no argument with the 12-month recovery period, as proposed by Johnstone.

8. Should the FAC provide for definitive production standards?

The fuel adjustment clause should adopt definitive production standards as a means of guaranteeing consumer protection. Under traditional base rate regulation, the utility bears the brunt of the additional cost if there is an outage in one of its lower cost base load generating units. In particular, these costs are the fuel and purchased power costs that are incurred when the low-cost generation is replaced with higher cost generation during the period of an outage. The traditional base rate regulation ensures that the consumers, the party least able to control outages, are protected from the costs of outages. A recent example is illustrative: if a fuel adjustment clause had been in effect when Taum Sauk went out of service, the consumers could have been immediately responsible for the higher cost of fuel and purchased power. The fuel adjustment clause recovery of the cost of replacement power is tantamount to providing "outage insurance" for Aquila. There is no reason for consumers to assume such risk and effectively provide such insurance for Aquila, where they are simply not in control of the circumstances. [86]

The performance standard that should be adopted for a coal-fired MWh is an output of not less than 96 percent of the coal-fired MWh output that is a part of the Commission Staff's fuel run in this proceeding. This Staff fuel run is based on a normal

[85] Johnstone Rebuttal, p. 23.
[86] Johnstone Rebuttal, pp. 16 – 7.

level of outages. The Staff has examined the outage history and built into its analysis a reasonable level of performance. This model does not reflect either the best or the worst performance possible, but rather a reasonable, normal level based on the analysis of several recent years of experience. As a means of bolstering the figure proffered, the attachment to Mr. Rooney's direct testimony at Schedule HDR-8 is illustrative. That schedule provides a forecast of coal-fired generation for the period of 2006 through 2010. The year with the lowest amount of coal fired generation had generation equal to 96.7 percent of the average for the entire period. [87] If Aquila generation does not come up to the level of the performance standard (in either of the accumulation periods), then additional generation would be imputed. The generation would be imputed at the average cost of coal-fired generation during the period. In order to give effect to the lower-cost generation that is imputed, it would be necessary to remove a corresponding quantity of high-cost generation from the generation mix. [88]

9. Should the FAC reflect a rate cap on the amount of fuel costs increases that can be passed through to ratepayers?

The Commission should adopt what is referred to as a "soft rate cap." The effect of this "soft cap" is to limit the immediate increase, but to provide for the intended recovery through an extended recovery period while providing interest to Aquila to compensate it for the carrying cost. [89] The cap should be set at 1.5%. This would, in effect, allow the average retail customer to experience a rate increase of up to 3% per year. The effect would still vary from customer to customer and among other rate classes, but it would provide a reasonable level of protection to all

[87] Johnstone Rebuttal, p. 18.
[88] Johnstone Rebuttal, p. 19.
[89] Johnstone Rebuttal, p. 24.

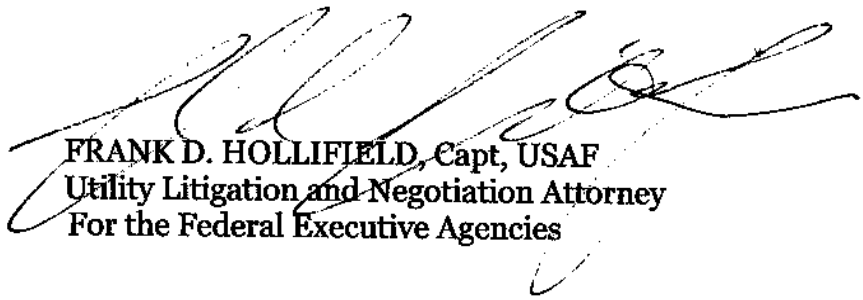
consumers. Such a rate cap contains other, beneficial features besides extending recovery time and limiting dramatic rate increases. By definition, the rate cap would come into effect only when there are significant increases in the cost of fuel purchase power and off system sales margins. Under these circumstances, it is likely that the parties, and perhaps the Commission itself, would wish to have an investigation before the full amount of the increase is passed through to consumers. By limiting the initial amount of any increase to 1.5 %, there would be a twelve-month delay during which a prudence review or any other review could be conducted by the Commission. Under these circumstances, besides just limiting the extent of any increase at any point in time, there is the beneficial effect of better ensuring that the costs recovered ultimately will only be those of that had been prudently incurred by Aquila. [90]

10. What should be the recovery period for any fuel costs that exceed the rate cap?

In addition to limiting the initial amount of any increase to 1.5 percent, a twelve-month delay during which a prudence review or any other review could be conducted by the Commission would be a sufficient protection for consumers, while allowing for a reasonable cost recovery by the utility. Besides just limiting the extent of any increase at any point in time, there is a beneficial effect of better ensuring that the costs recovered ultimately will only be those of which had been prudently incurred by Aquila and would prevent "sticker shock" on the part of consumers. [91]

[90] Johnstone Rebuttal, p. 25.
[91] Johnstone Rebuttal, p. 25.

Respectfully submitted this, the 27th day of April, 2007.



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CERTIFICATE OF SERVICE

I hereby certify that copies of this brief have been mailed or transmitted by facsimile or electronic mail to all counsel of record in this proceeding, as provided for by the Secretary of the Commission, this, the 27th day of April, 2007.

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