

# **SCHEDULE WEB-5**

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Date: February 25, 2005

To: Energy Resources

From: Commodity Risk Management

RE: Missouri Natural Gas & Purchase Power Hedge Strategy – Implementing the Market Neutral Approach - Update

The Missouri Public Service Commission (“MPSC”) issued an April 2004 order accepting the Stipulated Settlement (the “Stipulation Agreement”) between interveners and Aquila, Inc. d/b/a Aquila Networks – Missouri (“Aquila”) regarding Aquila’s rate disposition for the period April 22, 2004 through April 21, 2006. Appendix A of the Stipulation Agreement details the Interim Energy Charge (“IEC”) by which Aquila is allowed to recover, subject to the specified predetermined energy charge limitation, the production fuel and purchase power costs incurred to meet combined Missouri Public Service and St. Joseph Light & Power Company customer requirements during that period. In the event the cumulative two years of energy charges under the IEC are determined to be less than the predetermined charge Aquila will be obligated to refund any over collection thereof to its constituent ratepayers. Representatives of MPSC staff and Aquila management will if necessary, determine the reasonableness of cumulative energy charges, from both a customer and shareholder perspective. To that end, Aquila continues to refine and correspondingly implement the post 2004 Hedging Strategy detailed below.<sup>1</sup>

Aquila’s hedging plan for natural gas and on-peak purchase power is designed to be market neutral. Market neutral means the utility is not trying to make a directional call on whether the price of natural gas or on-peak purchase power is rising or falling but rather methodically purchasing financial contracts that result in an average market cost over an extended period of time. This approach dampens the affect of rapidly rising or declining markets on the system fuel, specifically natural gas, and on-peak purchased power costs. There are two key elements of a hedging program:

1. Determine how much of the price volatility the utility needs to mitigate. For example: Purchasing all requirements under long-term fixed price contracts provides 100% price certainty but takes away any benefit of declining markets from the utility and ultimately it’s customers. Aquila and the MPSC Staff have discussed and Aquila has subsequently implemented a strategy that provides price mitigation on two-thirds of its natural gas and on-peak purchased power volumes.<sup>2</sup> One third of the volumes float with index.
2. Determine what period of time is included in the hedging program. The time period selected can vary from hedging only summer peak loads for the current year to a multi-year hedging that dollar cost averages the price for an extended period and mitigates year-to-year volatility. Aquila and the MPSC Staff have discussed and Aquila has subsequently implemented a strategy of three years.<sup>2</sup>

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The hedging plan uses fixed price contracts and options that financially settle for the difference between the market price on the day of settlement and the fixed price on the contract. These financial settlements are accounted for in account 417.1 Expenses of non-utility operations. These financial settlements are part of the utility operations. However, because they are financial instruments they are not provided for within the FERC defined fuel accounts. The hedging plan is executed by purchasing one-third of the monthly forecast quantity, for each month over a 28 month period, proportionally procured in fixed price financial contracts. An additional one-third of the monthly forecast quantity is proportionately procured using options (primarily participatory collar) form and the remaining one-third of the monthly forecast quantity will be purchased at the then prevailing daily market indexes (i.e. floating with the market). This portfolio approach (i.e. use of fixed price financial instruments, options, and index) mitigates the impact of rising prices with the two thirds quantity that is hedged with fixed price contracts (1/3) and options (1/3) while the index portion (1/3) of the portfolio floats upward with market prices. This same approach also allows the utility and ultimately its customers to participate in declining markets through the two-thirds of the portfolio that floats with index (1/3) and the options (1/3) (that would not be exercised) when prices were declining. The fixed price contracts will result in higher than market cost for one third of the portfolio.

Rather than implement a generally less efficient on-peak purchase power hedge plan at a remote hub Aquila will convert projected on-peak purchase power quantities into equivalent quantities of natural gas.<sup>3</sup> To determine the equivalent number of natural gas contracts to hedge on-peak purchased power, a market heat rate is computed. The market heat-rate is calculated by dividing the sum of the forward CIN price plus or minus the historic monthly CIN/N-SPP or CIN/ENT basis by the sum of the NYMEX forward and historic monthly Williams Pipelines basis net losses.<sup>4</sup>

$$\text{Market Heat Rate} = \frac{\text{CIN monthly forward prices} \pm \text{appropriate basis to N-SPP or Entergy}}{\text{NYMEX Forward gas} \pm \text{Williams Pipeline basis}}$$

The volumetric forecasts for the natural gas and natural gas equivalent on-peak purchase power needed to meet Aquila's net system requirements during the subsequent three years is developed as part of the fuel budget process. This budget is typically developed prior to July 15 of each year. (e.g., By July 15, 2004 the initial monthly fuel budget forecasts for calendar year's 2005, 2006, and 2007 will be established, budgeted forecasts are finalized near the latter part of October). Energy Resources will then commence, subject to the subsequent monthly fixed and collar structure price and premium/price targets established by Commodity Risk Management, purchasing a proportional quantity of fixed-price and options during each month of the subsequent three years, sufficient to have fully procured the one-third volume of fixed and options prior to October 31 of the calendar year immediately preceding the calendar year of need (e.g., purchase calendar 2007 monthly fixed needs in equal quantities during the 28 months from the date hereof through October 31, 2006).<sup>5</sup>

If there are significant changes in key inputs to the volumetric forecast for natural gas and on-peak purchased power such as the cost of natural gas, the cost of on-peak purchase power, scheduled unit availability or whenever directed by Commodity Risk Management, Energy Resources will re-run the fuel budget model. These re-runs of the model will be done no less frequently than three months of the prior (re)run. The resulting new forecasted natural gas and on-peak purchase power

natural gas equivalent quantities will then become the new-targeted procurement quantities. Energy Resources will then adjust its purchasing to meet the new target quantities.

Energy Resources and Commodity Risk Management will meet no less than once a month to discuss all issues relevant to this hedging process. Energy Resources will record and otherwise document and all transactions including a summary of and current valuation of the hedge accounts.

The 2005 fuel (and purchase power) budget process is predicated on a Missouri Power Supply Plan comprised of the i) effective commercial operation of the South Harper Peaking Facility on June 1, 2005<sup>6</sup>, ii) consummation of a definitive agreement regarding the purchase of 78 MW's of unit participation capacity and associated energy from Nebraska Public Power District's Cooper Nuclear Station (reference the June 4, 2004 Letter of Intent), and iii) consummation of a definitive agreement regarding the purchase of 150 MW's of system participation capacity and associated system-average-cost energy from Southwestern Public Service (reference the June 22, 2004 Memorandum of Understanding).<sup>7</sup>

Energy Resources will, subject to the directives of Commodity Risk Management, mechanically and proportionally close the monthly fixed and option positions procured in accordance with the above plan at expiration and on or before the expiration date depending upon market conditions, respectively, of the corresponding contract month (e.g., March 2006 fixed contracts will be sold/settled no earlier than the first trading day and no later than expiration on the last trading day of February 2006).<sup>8</sup>

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<sup>1</sup> During the applicable portions of calendar 2004 Energy Resources mechanically and proportionally purchased fixed price and correspondingly sold or otherwise closed NYMEX positions post the effective date of the Stipulation Agreement through the end of the 2004.

<sup>2</sup> Aquila presented its 2005-2007 hedging plan to MPSC and OPC staffs at the July 9, 2004 Resource Planning update.

<sup>3</sup> Exceptions can from time-to-time be made provided Commodity Risk Management concurs. Energy Resources will be responsible for documenting any such exception.

<sup>4</sup> It is understood that the appropriate liquid forward market used to determine the market heat rate will likely change as the regional transmission markets develop, potentially necessitating a change in the forward and/or basis used to determine the representative market heat rate.

<sup>5</sup> Due to implementation timing limitations calendar 2005 and 2006 monthly quantities will be procured over four and 16 month timeframes, respectively (e.g., Energy Resources will purchase approximately 60 NYMEX monthly contracts each month July through October to procure the one-third fixed price component, approximately 2.4 Bcf, of the calendar 2005 forecasted 7.2 Bcf natural gas and on-peak purchase power equivalent natural gas need)

<sup>6</sup> South Harper Peaking Facility effective commercial operation date will be amended pending a meaningful determination/resolution of Aquila's i) request for Certificate of Public Convenience and Need or ii) appeal to the Missouri Court of Appeals.

<sup>7</sup> Southwestern Public Service and Aquila continue to negotiate a definitive agreement despite expiration of the Memorandum of Understanding. Aquila continues to seek alternative 2005 summer and longer-term power supply alternatives.

<sup>8</sup> Effective January 2005 Energy Resources shall document the economic justification if it closes a position, other than puts, prior to that positions expiration.