Table 2 (Cont.) Case 2 Description

| | | | | | | | |
|--------------------------|-------------|-------------------|------------|--------------|------------|--|--|
| | | Evaluation Period | | | | | |
| Į. | | June, 2000 | June, 2001 | June, 2002 | June, 2003 | | |
| 4 | | to | at | to | to | | |
| Case 2 | | May, 2001 | May, 2002 | May, 2003 | | | |
| . | | | | | | | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 | | |
| | | L | | | | | |
| Offered Capac | | | Capacity U | tilized (MW) | | | |
| LS Power | 540 | | | | | | |
| UCU | 500 | | 500 | 500 | 500 | | |
| Aquila 1a | 100 | 100 | | | | | |
| Aquila 1b | 75 | 75 | | | | | |
| Aquila 3 | 100 | | | | | | |
| SPS A | 75-100 | 75 | | | | | |
| SPS Peak | 25 | 25 | | | | | |
| Basin | <=100 | | | | | | |
| NP Energy | 100 | | | | | | |
| Southern | 100 | | | | | | |
| CP&L | 150 | | | | | | |
| NORAM | 100 | | | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | | | |
| Peaking Contract | | | | | | | |
| | | | | | | | |
| Total Capacity Addition | s (MW) | 255 | 500 | 500 | 500 | | |
| | | | | | | | |
| Excess Capacit | y (MW) | 0 | 95 | 60 | 20 | | |

Table 2 (Cont.) Case 4 Description

| | | | | | |
|--------------------------|----------|-------------|-------------|--------------|------------|
| | | 1 | Evaluati | on Period | |
| 1 | | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| ĺ | | to | to | 10 | to |
| Case 4 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 |
| <u>_</u> | | i | | | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 |
| Offered Capac | itv (MW) | } | Capacity U | tilized (MW) | |
| LS Power | 540 | | | | |
| UCU | 500 | | | | |
| Aquila 1a | 100 | 100 | | | |
| Aquila 1b | 75 | 75 | ~ | | |
| Aquila 3 | 100 | | | | |
| SP\$ A | 75-100 | 75 | 100 | 100 | 100 |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | , | | | |
| NP Energy | 100 | | 100 | 100 | 100 |
| Southern | 100 | | 100 | 100 | 100 |
| CP&L | 150 | | 150 | 150 | 150 |
| NORAM_ | 100 | | | | |
| Unit-Contingent Purchase | 55 | \$ 5 | | | |
| Peaking Contract | | | | | 30 |
| | 40704.5 | | | | |
| Total Capacity Addition | is (MW) | 255 | 450 | 450 | 480 |
| Evene Co | - (ADAD | | | | |
| Excess Capaci | th (MAA) | 0 | 45 | 10 | 0 |

Table 2 (Cont.) Case 4b Description

| { | | | | on Period | |
|--------------------------|--------|---------------------------------------|-------------|---------------|-------------|
| · | | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| | | to | to | to | to |
| Case 4b | | May, 2001 | May, 2002 | May, 2003 | May, 2004 |
| Capacity Nee | d (MM) | 255 | 405 | 440 | 480 |
| Offered Capacit | y (MW) | - | Capacity U | tilized (MW) | |
| LS Power | 540 | | | | |
| UCU | 500 | · · · · · · · · · · · · · · · · · · · | | ~ | |
| Aquila 1a | 100 | 100 | ···· | | |
| Aquila 1b | 75 | 75 | | | |
| Aquila 3 | 100 | | | | |
| SPS A | 75-100 | 75 | | | |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | | | | |
| NP Energy | 100 | | 100 | 100 | 100 |
| Southern | 100 | | 100 | 100 | 100 |
| CP&L | 150 | | 150 | 150 | 150 |
| NORAM | 100 | | 100 | 100 | 100 |
| Unit-Contingent Purchase | 55 | 55 | | | |
| Peaking Contract | | | | | 30 |
| Total Capacity Additions | (MW) | 255 | 450 | 450 | 480 |
| Excess Capacity | (MW) | 0 | 45 | 10 | 0 |

Table 2 (Cont.) Case 6 Description

| | | | Evaluati | on Period | |
|--------------------------|---------|---------------|-------------|---------------|-------------|
| (| | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| | | to | to | to | to |
| Case 6 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 |
| Capacity Nee | d (MW) | 255 | 405 | 440 | 480 |
| Offered Capaci | ty (MW) | <u> </u> | Canacity II | tilized (MW) | |
| LS Power | 540 | | | diezed (inte) | |
| UCU | 500 | | | | |
| Aquila 1a | 100 | 100 | | | |
| Aquila 1b | 75 | 75 | | | |
| Aquila 3 | 100 | | 100 | 100 | 100 |
| SPS A | 75-100 | 75 | 100 | 100 | 100 |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | | | | |
| NP Energy | 100 | | 100 | 100 | 100 |
| Southern | 100 | _ | 100 | 100 | 100 |
| CP&L | 150 | | | | |
| NORAM | 100 | | | | 1 |
| Unit-Contingent Purchase | 55 | 55 | | | |
| Peaking Contract | | | 5 | 40 | 80 |
| Total Capacity Additions | (MW) | 255 | 405 | 440 | 480 |
| Excess Capacity | (MW) | 0 | 0 | 0 | ā |

Table 3
RealTime Modeling Results with Sales
June 1, 2009 to May 21, 2004

| Cart | | | | • | | Total | Tetni | Tutal | Tetal | % Above Local | 1 Straye Lans |
|---|------------|--|---|---|------------------------------|---------------------------------------|---------------|---------------|-----------------|---------------|-----------------------------|
| Col. | Case | Contact | | | Cost 5 | Persons 1 | 3463 | | | | |
| The content | Ga e 1 | | 210 | 4 665 4 151 | £ 172.35(12) | 2 3674/3/626 | 7277 181 134 | 3 270,430,446 | 3 415,361,744 | | * _ - 70,945,157 |
| Col. | | FE Same (1mg & (compre 3061) | 270 | 3213,447 | 3 16E (EZ),\$18 | l | |) | 1 | |] |
| Column C | | Amula Option to \$71/2000 - 9/30/2000 | | 75 | S 4,864,529 | Ì | | | } | ĺ | ľ |
| Part Company Part Part Company Part P | | SPS Dollar A (Parker Requirement) | 75 | 344,547 | \$ 16,002,702 | | | | Ì | Ì | į |
| Section Sect | ! | (Proding Copyrig) | - 5 | 12.624 | 1 12T.041 | l | | | | } | j |
| Section Company Section Company Section Company Section Company Comp | (| Sales | | 4,630,473 | 3344,185,184 | | | 200 500 | 201 148 001 | | } |
| Column Process Column | Care 2 | | . SOI | CHOTAIL | 2 Las 441 861 | 1 24,000,946 | -2239,940,940 | 3 382,482,765 | 2 234.00 | | |
| Column Process Column | | Capitalia (met 3 dougles 5001) | 250 | 4,741,567 | 5 134,812 48 | | | | | Ì |) |
| Column Process Column | 1 | Analy Option to \$10,000 - STREET | | 10) | 5 1,000,452 2 1,644,100 | | | | + | ļ | 1 |
| Test | ! | LPS Opin A (Formal Requirement) | 75 | 144,173 | 14,074,017 | ! . | i | | | ì |] |
| Test | 1 | (Presiding Compatibil) | | 12.221 | \$ 1,728,437 \$ 1,110,365 | 1 | | Į į | | |] |
| Col. 1 | | Sales | | | | | | A | * ** ** ** *** | 41.44 | 4 44 194 RE) |
| The content | Case 3 | | 1 (4) | 272 644 | W 40 50 | 3 264,750,240 | -4103.277,262 | 252,501,747 | | 7.2. | 7 |
| Cont. Cont | | | 190 | 2,544,776 | 22,601,794 | į | | | | | 1 |
| Cont. Cont | 1 | Applie Option 1 | | | | ! | | | | | |
| Total Content Total Tota | 1 | (Auto Cares I) 16/1/2000 - 5/03/2001 | 75 | | 141170 | ļ | | | | | į į |
| Learn Control Contro | 1 | SP & Cyfre & Profes Requirement | | 11.040 | \$ 1730.005 | | (| | | ļ | |
| Column | l 1 | Unit Continue Parshare | <u> </u> | 12.65 | 11222 | , | | | | | 4 (|
| CS | ł | Perhap Control | ↓ | -4.567.563 | 4115.277.361 | | | <u></u> | | | |
| Process | Edde 4 | | | | | 12 Di es | 4115,370,300 | 1 29,791,259 | 5 430,263,334 | 14.5% | 1 34,846,373 |
| We first | 1 | CFN. | | 2 815 817 | \$ 60 A00 177 | 1 | | | | ļ | ((|
| Part Part 1 | } ' | на бладу | 165 | 7,611 | | | | | | | 1 |
| Part Company 19 19 19 19 19 19 19 1 | 1 | Agent Comment to 6/9/2000 - 6/90/2000 | | 104 | 4,816,868 | | | | , | | |
| Part Company 19 19 19 19 19 19 19 1 | S | CPS (Debut A (Patter Approximent) | TSnts | 2.755.294 | T MAN | | • | | i | | |
| Care 16 | ا ا | Parking Capacity | | 10,446 | 1,721,74 | | | | . [| | |
| Company Comp | 1 | Pushing Contract | 3. | 6 4 | 1,444,680 | | | | | | |
| Case 1 10 1 10 1 10 10 10 | <u></u> | | | -1,049,151 | 4115.370,360 | 4 207414-773 | 415 232 816 | 3 305,144 519 | 1 436 648 961 | 11,674 | \$ 45,347,984 |
| | Carrier . | CPUL CPUL | | | | | | | | | |
| Explicit Cycles 1 |) j | 3-4m | | 2,000,071 . 12,344 | 11,61,700 | | | i | | | |
| Patching Company) | } | Ande Outes 1 a 6/1/2000 - 8/20/2000 | 198 | 31 | 4.41.533 | | • | | (| | |
| Patching Company) | 1 | August Option to 10/1/2000 - 5/51/2001 | | 131 | 1276145 | | Ś | ſ | | | |
| Packing Company Processing 1 |] | SPS Option A (Public Requirement) | 15 | 247,644 | NE. 866.715 | | 5 | | | | |
| Table Tabl |]] | [[Print] [[[[]]] [[] [] [] [] [] [| | 12,744 | 3,121,130 | | - 4 | | [| | |
| Cont | 1 | musking Compass | | 9 1 | 1,440,600 | | -,} | | | | |
| Color Colo | | | | | | 1 No. 656.954 | 4104 544 438 | 5 227 043 344 | 1 449,176,580 | 13.892 | 3 49,409,409 |
| Cont 6 C | | σĸ | | 3 665 143 | 11,840,526 | | 1 | i | | | |
| Cont 6 C | ì i | Paragram | 100 | 8,746 | 19:513.373 | | 1 | ſ | , | | |
| Control Partic Requirement 198 1331,514 172,772,614 | ! : | A | | | 1,249,300 | ·] | , , | 1 | | | |
| Proving Carbons | | ROSEA POR CONTRACTOR OF THE PROPERTY OF THE PR | FOR | | 77 337,404 | İ | ŀ | í | | (| |
| Company Purchase 1 | | EP S Dylan A (Parks Requipment) | | 10 449 | 1720 033 | | į, | | 1 | - (| |
| Public Content | | | 35 | | 1,120,041 | · · · · · · · · · · · · · · · · · · · | ł | { | 1 | 1 | |
| Case 1 (3) 794 207 \$ 3,591 (0) 797 \$ 3,565 (0) 799 \$ 37,565 (0) 799 \$ 37,565 (0) 799 \$ 3,575 (|] | Pushing Commert | | A # 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 3104,544,420 | | | } | | | |
| Cord Control Cord | Cm4 S | | | | | 1 277595,000 | 179,905,446 | 2 345 C15 B34 | \$ 450,522,624 | 13.2% | 3 59.755.5E4 |
| Applies Option 1: \$(1/2002-930/2005) 100 198/3 \$2,576,120 | | | | 294.307 ; | 25,788,767 74,348,581 | | 1 | j | Į | , | |
| Applies Option 1: \$(1/2002-930/2005) 100 198/3 \$2,576,120 | | er tear | 100 | (8,116) | 18.961.500 | | Ş | } | | | |
| SSS Equitor A (Proteint Responsement) | t i | 4/1/2000 - 9/30/2006 | | 195) : | 6,816,136 | 1 | į | · · | | | |
| Providing Completing 23 10,044 3 1272,715 10,044 3 1 1,446 2000 1 1,446 2000 1 1,446 2000 1 1,446 2000 1 1,446 2000 1,446 200 | Į į | SS Date A (Felial Represent) | 79160 | 3,736,864 | 97,834,647 | 1 | } | ļ | | | |
| Registing Control 10 1.549,355 3.1590,445 | (| (Packing Capacity) | | 10,104 | 1,739,763 | | ŀ | } | } | } | |
| Cote 6 | Į · | Acoting Controct | | | 1,440,007 | i i | } | j | } | } | 1 |
| Cots B | <u> </u> | | LL | 3,287,595 | A79 505,446 | 2 249,212,524 | -5107,603,417 | 202,066,916 | 1 434 274.021 | 11,4% | \$ 43,769,530 |
| 10 | Con d | Applie Carleys 1 | | 1647 | N,147H | | | | | | |
| Figure Dyslam (q. 6/4000 - 873(2000) 100 100 1 | ! | ## (F=5)7 | | (7,44) 7 (75, 66) | 16,873,54.2 | ļ Ì | | i | j | J | 1 |
| Table | ł | Septem Anna Dules Is. 0/502000 - 8/30/2000 | 100 | 184 | 4.019.356 | Ì | i | j | 1 | | |
| Table | [| Apple Dylet Ib 101/7000 - 3/31/2001 | | 7 778 664 | 37 27 244 | | 1 | 1 | ſ | ĺ | |
| Table | | SPS Option A Provide Requirements | 풀 | 12.0441 | 1,721,113 | | } | 1 | í | | |
| Table | [| Unit Conde pard Purchase | ii. | | 200,511 | } | } | 1 | Í | j | ļ |
| Septembox Sept | Į. | 11-44-10-0 Advitary | | | 410/401/17 | | | | | ليبي | |
| Septimen 100 | C | | | | | 5 297,679,013 | 4190'92 134 | 2 317,517,365 | 3 444.263,786 1 | 13,741 | <u>. 21.778.99.</u> |
| 1,(7),441 7,1,12/204 7,1, | | Section 3 | | 196 | 74,377,367 |] | | 1 | j | | 1 |
| Appell Option 1 | (| | | 1 473 4641 3 | 71.147.054 |] | } | 1 | } | | i |
| | ł | America Company in 6/1/2000 - \$130/2000 | | . 014 | 1,041,600 | | | j | • |] | t |
| (Jah Cantegori Parama 5) 12,766 1 12251 | 1 | Dr. Opton A (Parito) Pageronnent | 75/190 | \$ 150, 17g | 97,325,444 | | | 1 | j | 1 | ł |
| | Į | (Passing Cap4Clty) | | 12.706 | 111(7) | | | 1 |] | 1 | <u>†</u> |
| Pusing Control | { | Probing Contract | | | (,000,044) | | | 1 |] | Ì | • |
| 3.140,140,141,144 | L | Ş = : | | -5_143_100 | 4 140 443 134 | | | | | | |

blades GPS Option & Partial Requirement has a copusalty of 75 50W for the first year and 180 50W for the faul Itrus years GPS Option A seasonly controlled on the year for cases 1, 2, 4s, and its Pasking Couload installers a copusity charge of \$4.9616V-um, for all copositing sistency

AQUILA, INC. CASE NO. ER-2004-0034 MISSOURI PUBLIC SERVICE COMMISSION DATA REQUEST NO. MPSC-607 SUPPLEMENTAL RESPONSE

DATE OF REQUEST:

December 2, 2003

DATE RECEIVED:

December 2, 2003

DATE DUE:

December 22, 2003

REQUESTOR:

Cary Featherstone

BRIEF DESCRIPTION:

Support for the EWG Build Option

QUESTION:

With respect to the meeting with Bob Holzwarth and Frank DeBacker on October 28, 2003, 1. please supply all analyses relating to the need for Missouri Public Service capacity used to support recommendation presented to Mr. Bob Green during summer of 1998 to "build" generating capacity as an exempt wholesale generator (EWG) non-regulated unit. 2. Provide any notes taken at this meeting by all of those present. 3. Provide letters, e-mail, correspondence and any other communication generated as result of the presentation made by the regulated entity UtiliCorp Power Supply for the EWG proposal.

RESPONSE:

1. Analyses relating to the need for additional power supply resources for Missouri Public Service was communicated to Staff and OPC through the following:

Attachment 1 - Letter of April 7, 1998 to Mike Proctor, Staff, With a copy to Ryan Kind, OPC.

Attachment 2 – 1998-2003 Preliminary Energy Supply Plan presented to Staff and OPC on August 24, 1998

2. Any notes taken at the referenced meeting are no longer available.

Any letters, e-mail, correspondence, and other communication are no longer available.

ATTACHMENT:

Attachment 1 - Letter of April 7, 1998 to Mike Proctor, Staff, With a copy to Ryan Kind, OPC

Attachment 2 – 1998-2003 Preliminary Energy Supply Plan presented to Staff and OPC on August 24, 1998

ANSWERED BY: Frank DeBacker

SIGNATURE OF RESPONDENT

Supplemental Response: See attached <u>"Report on the Evaluation of Power Supply Proposals"</u> dated 8/28/98. Missing page 2 was found and included in this complete copy of the report. Also included is the 2/1/99 update on <u>"Report on the Evaluation of Power Supply Proposals"</u>.

Supplemental Attachments: Hard copy of <u>"Report on the Evaluation of Power Supply Proposals"</u> dated 8/21/98 and update to <u>"Report on the Evaluation of Power Supply Proposals"</u> dated 2/1/99.

Supplemental Response ANSWERED BY: Frank DeBacker

RECEIVED

UTILITY SERVICES DIV.
PUBLIC SERVICE COMMISSION



February 1, 1999

Mr. Frank DeBacker Vice President - Fuel & Purchased Power Utilicorp United 10750 East 350 Highway Kansas City, Missouri 64138

Report on the Evaluation of Power Supply Proposals

Mr. DeBacker:

This letter summarizes the results of Burns & McDonnell's evaluation of power supply proposals. UtiliCorp United (UCU) provided the proposals and updated offers from Houston Industries (HI) and Merchant Energy Partners (MEP).

The objective of the evaluation was to verify that the information from the proposals had been accurately input into the model. The evaluation was also performed to determine the power supply option which, when combined with UCU's existing resources, would result in the lowest total cost of power supply for UCU during the evaluation period of June 1, 2000 to May 31, 2005. The evaluation was performed using the RealTime production cost modeling software written by the Emelar Group and utilized the RealTime database of existing power supply resources provided by UCU.

Burns & McDonnell verified that the information provided by UCU had been correctly input into the model. Assumptions made in the evaluation of the offers were provided by UCU and included the natural gas price forecasts, spot energy market price forecasts, and energy sales price forecasts. Burns & McDonnell has reviewed these assumptions and determined that they are reasonable.

The results of the RealTime modeling are shown on the attached tables. Both proposals were modeled under a base, low, and high gas price forecast and a base, low, and high energy market price forecast. All cases were run with and without the sale of energy not required by UCU. The energy to be sold could be provided by any available resources in each case modeled.

As shown in the tables, the total expenses of the two proposals were very similar across all of the cases run. The NPV of total costs for the MEP option is slightly less than the HI option in all but one case. The HI proposal was less expensive in the case involving the base gas price forecast, low market energy prices, and no off-system sales.



Mr. DeBacker February 01, 1999 Page 2

We appreciate the opportunity to be of service to Utilicorp United. We would also like to express our appreciation for the cooperation we received from you and Mr. Roger Parkes during the evaluation process. If there are any aspects of the analyses that you wish to discuss, please do not hesitate to call us.

Sincerely,

James M. Flucke, P.E.

w M. Flushe

Project Manager

Missouri Power Supply Bid Comparison 6/1/2000 - 5/31/2005 \$x1,000

| | | | Anns | al Cost \$xti. | 000 | | NPY |
|---|----------|---------------------|---------|----------------|---------|-----------|-----------------|
| | From> | Jun-00 | Jun-01 | Jun-02 | Jun-03 | Jun-04 | Jkn-00 |
| | To> | May-01 | May-02 | Мау- 03 | May-04 | May-05 | May-05 |
| Without Off System Sa | aies_ | | | | | | |
| Base Gas & Mkt Merchant Energy Partners | | 108,388 | 130,053 | 135,381 | 143,952 | 154,103 | 530,017 |
| Houston Industries | | 108,388 | 129,074 | 136,181 | 145,432 | 156,081 | 532,248 |
| Low Gas & Mkt Merchant Energy Partners | | 107,201 | 128,131 | 133,679 | 141,514 | 150,536 | 521,700 |
| Houston Industries | | 107,201 | 127,071 | 133,707 | 142,439 | 152,179 | 522,611 |
| High Gas & Mkt Merchant Energy Partners | | 109,286 | 131,741 | 136,817 | 145,969 | 157,239 | 537,054 |
| Houston Industries | | 109,267 | 130,352 | 138,055 | 147,781 | 159,531 | 539,738 |
| Base Gas & High Mkt Merchant Energy Partners | | 109,286 | 131,611 | 136,202 | 144,902 | 155,416 | 534,42 8 |
| Houston Industries | | 109,287 | 130,372 | 137,863 | 147,227 | 158,542 | 538,522 |
| Base Gas & Low Mkt Merchant Energy Partners | | 107,201 | 128,216 | 134,081 | 142,533 | 152,026 | 523,854 |
| Houston Industries | | 107,201 | 127,093 | 133,884 | 142,788 | 152,550 | 523,348 |
| With Off System Sales | Ē | | | | | | • |
| Base Gas & Mkt Merchant Energy Partners | | 104,398 | 124,280 | 125,783 | 135,176 | 145,695 | 501,582 |
| Houston Industries | | 104,49 6 | 123,971 | 132,218 | 141,965 | 152,742 | 516,301 |
| Low Gas & Mkt Merchant Energy Partners | i | 104,900 | 124,198 | 127,032 | 135,426 | 144,548 | 502,371 |
| Houston Industries | | 105,051 | 123,833 | 131,134 | 140,080 | 149,887 | 512,508 |
| High Gas & Mkt Merchant Energy Partners | . | 103,334 | 123,486 | 123,798 | 134,399 | 146,379 | 498,234 |
| Houston Industries | | 103,366 | 122,870 | 132,193 | 143,092 | 155,022 | 516,671 |
| Base Gas & Hìgh Mkt | | · | · | · | · | ,, ,,,,,, | 0.0,= |
| Merchant Energy Partners | • | 103,334 | 123,245 | 122,774 | 132,659 | 143,683 | 494,100 |
| Houston Industries | | 103,366 | 122,768 | 131,681 | 142,090 | 153,522 | 514,421 |
| Base Gas & Low Mkt Merchant Energy Partners | , | 104,900 | 124,319 | 127,710 | 136,885 | 146,458 | 505,385 |
| Houston Industries | | 105,051 | 123,918 | 131,452 | 140,701 | 150,685 | 513,833 |

Merchant Energy Partners Annual Ownership and Operating Cost \$x1,000

| | | Ann | ual Fixed Co | <u>st</u> | |
|---|-----------------------|----------------------|--------------|----------------|----------------|
| From> | ์ บั⊓ บ- 00 | Jun-01 | Jun-02 | Jun-03 | Jun-94 |
| To> | May-01 | May-02 | May-03 | May-04 | May-05 |
| | 4 000 | | | | |
| Aquila Capacity Payment | 4,866 | 47.000 | 07.000 | 07.666 | 07.000 |
| MEP Capacity Payment | 7 500 | 17,696 | 27,660 | 27,660 | 27,660 |
| SEC Capacity Payment | 7,566 7,476 | 6,693 | | | |
| Union Electric Capacity Payment | 7,176 | | | | |
| Long Term Peaking Capacity Cost | | | | 2,837 | 6 207 |
| Short Term Peaking Capacity Cost Gas Reservation Cost | | 6,890 | 6,890 | 2,637 6,890 | 6,397 6,890 |
| G82 KE2ELABODII CO21 | | 0,000 | 0,030 | 0,090 | 0,030 |
| Total Fixed Costs | 19,608 | 31,279 | 34,550 | 37,387 | 40,947 |
| | | <u>Total Ar</u> | nuel Supply | Cost | |
| Without Off System Sales | | | | | |
| MWh \$ w/Base Gas & Mkd | 88,779 | 98,774 | 100,831 | 106,585 | 113,157 |
| • Total Cost | 108,388 | 130,053 | 135,381 | 143,952 | 154,103 |
| | • | | ••• | | |
| MWh \$ w/Low Gas & Mkt | 87,592 | 96,852 | 99,129 | 104,127 | 109,589 |
| Total Cost | 107,201 | 128,131 | 133,679 | 141,514 | 150,536 |
| | | | | | • |
| MWh \$ w/ High Gas & Mkt | 89,678 | 100,462 | 102,267 | 108,582 | 116,293 |
| Total Cost | 109,286 | 131,741 | 136,817 | 145,969 | 157,239 |
| MWh \$ w/Base Gas & High Mkt | 89,678 | 100,332 | 101,652 | 107,515 | 144 400 |
| Total Cost | 109,286 | 131, 6 11 | 136,202 | 144,902 | 114,469 |
| 1 Dian Cost | 105,200 | 131,011 | 130,202 | 177,802 | 155,416 |
| MWh \$ w/Base Gas & Low Mkt | 87,592 | 96,937 | 99,531 | 105,146 | 111,079 |
| Total Cost | 107,201 | 128,216 | 134,081 | 142,533 | 152,026 |
| | | | | · | • • |
| Will Off Charles Colon | | | | | |
| With Off System Sales MWh \$ w/Base Gas & Mkt | 84,789 | 93,001 | 91,233 | 97,790 | 104,748 |
| Total Cost | 104,398 | 124,280 | 125,783 | 135,176 | 145,695 |
| 1561 6031 | ,04,050 | 124,200 | 120,700 | 100,110 | 145,085 |
| MWh \$ w/Low Gas & Mkt | 85,292 | 92,919 | 92,482 | 98,040 | 103,601 |
| Total Cost | 104,900 | 124,198 | 127,032 | 135,426 | 144,548 |
| | | | | | |
| MWh \$ w/ High Gas & Mkt | 83,725 | 92,207 | 89,248 | 97,012 | 105,433 |
| Total Cost | 103,334 | 123,486 | 123,798 | 134,399 | 146,379 |
| MWh \$ w/Base Gas & High Mkt | 83,725 | 91,966 | 88,224 | 95,272 | 102,736 |
| Total Cost | 103,334 | 123,245 | 122,774 | 132,659 | 143,683 |
| | 100 401 | ,, <u></u> | | | 1-0,000 |
| MWh \$ w/Base Gas & Low Mkt | 85,292 | 93,040 | 93,160 | 99,498 | 105,511 |
| Total Cost | 104,900 | 124,319 | 127,710 | 136,885 | 146,458 |
| | - | • | • | • | • |

Houston Industries Annual Ownership and Operating Cost \$x1,000

| | | Ann | ual Fixed Co | st | |
|----------------------------------|---------------------|----------------|--------------|---------|---------|
| From> | 00 -ถ มโ | <i>J</i> un-01 | Jun-02 | Jun-03 | Jun-04 |
| To> | May-01 | May-02 | May-03 | May-04 | May-05 |
| Houston Capacity Payment | | 23,576 | 23,576 | 23,576 | 23,576 |
| Aquila Capacity Payment | 4,866 | , | ,_, _ | 20,010 | 40,070 |
| SEC Capacity Payment | 7,566 | | | | |
| Union Electric Capacity Payment | 7,176 | | | | |
| Long Term Peaking Capacity Cost | ,,,,, | | | | |
| Short Term Peaking Capacity Cost | | | | 0.007 | |
| Gas Reservation Cost | | 0.755 | 0.755 | 2,837 | 6,397 |
| Gas Reservation Cost | | 8,755 | 8,755 | 8,755 | 8,755 |
| Total Fixed Costs | 19,608 | 32,331 | 32,331 | 35,168 | 38,728 |
| | | Total An | nual Supply | Cost | - |
| Without Off System Sales | | | | | |
| MWh \$ w/Base Gas & Mkt | 88,780 | 96,743 | 102 850 | 140 004 | 447.050 |
| | • | | 103,850 | 110,264 | 117,353 |
| _ Total Cost | 108,388 | 129,074 | 136,181 | 145,432 | 156,081 |
| MWh \$ w/Low Gas & Mkt | 87,592 | 94,740 | 101,375 | 107,271 | 113,451 |
| Total Cost | 107,201 | 127,071 | 133,707 | 142,439 | • |
| | 151,251 | | 150,151 | 172,700 | 152,179 |
| MWh \$ w/ High Gas & Mkt | 89,678 | 98,021 | 105,724 | 112,613 | 120,803 |
| Total Cost | 109,287 | 130,352 | 138,055 | 147,781 | 159,531 |
| | | | | , | |
| MWh \$ w/Base Gas & High Mkt | 89,678 | 98,041 | 105,531 | 112,059 | 119,814 |
| Total Cost | 109,287 | 130,372 | 137,863 | 147,227 | 158,542 |
| MATE CONTRACT CON SI AND SEE | 97 500 | 24724 | 404 570 | | |
| MWh \$ w/Base Gas & Low Mkt | 87,592 | 94,761 | 101,553 | 107,620 | 113,922 |
| Total Cost | 107,201 | 127,093 | 133,884 | 142,788 | 152,650 |
| MEH OF Symbols Dales | | | | | |
| With Off System Sales | 04.000 | | | | |
| MWh \$ w/Base Gas & Mkt | 84,888 | 91,639 | 99,886 | 106,797 | 114,014 |
| Total Cost | 104,496 | 123,971 | 132,218 | 141,965 | 152,742 |
| MWh \$ w/Low Gas & Mkt | 85,442 | 91,501 | 98,802 | 104,912 | 114 450 |
| Total Cost | 105,051 | 123,833 | 131,134 | 140,080 | 111,159 |
| 70.01 0001 | 100,001 | 120,000 | 101,134 | 140,000 | 149,887 |
| MWh \$ w/ High Gas & Mkt | 83,757 | 90,539 | 99,861 | 107,924 | 116,293 |
| Total Cost | 103,366 | 122,870 | 132,193 | 143,092 | 155,022 |
| | • | ,= | | | .00,0EE |
| MWh \$ w/Base Gas & High Mkt | 83,757 | 90,437 | 99,349 | 106,922 | 114,794 |
| Total Cost | 103,366 | 122,768 | 131,681 | 142,090 | 153,522 |
| · | | | | , | , |
| MWh \$ w/Base Gas & Low Mkt | 85,442 | 91,587 | 99,120 | 105,533 | 111,957 |
| Total Cost | 105,051 | 123,918 | 131,452 | 140,701 | 150,685 |
| • | | - | | • - • | |



August 21, 1998

Mr. Frank DeBacker Vice President - Fuel & Purchased Power Utilicorp United 10750 East 350 Highway Kansas City, Missouri 64138

Report on the Evaluation of Power Supply Proposals

Mr. DeBacker:

This letter summarizes the results of Burns & McDonnell's evaluation of power supply proposals made in response to the request for proposals (RFP) issued by Utilicorp United (UCU). The proposals were opened on July 6, 1998 with representatives of UCU and Burns & McDonnell in attendance. Proposals were received from the following companies in alphabetical order:

- Aquila Power Corporation (Aquila)
- Basin Electric Power Cooperative (Basin)
- Carolina Power & Light Company (CP&L)
- LS Power, LLC (LS Power)
- NorAm Energy Services (NorAm)
- NP Energy, Inc. (NP Energy)
- Southern Company Energy Marketing (Southern)
- Southwestern Public Service Company (SPS)

The objective of the evaluation was to determine the power supply option or combination of power supply options which, when combined with UCU's existing resources, would result in the lowest total cost of power supply for UCU during the evaluation period of June 1, 2000 to May 31, 2004. The evaluation was performed using the RealTime production cost modeling software written by the Emelar Group and utilized the RealTime database of existing power supply resources provided by UCU. Assumptions made in the evaluation of the offers are listed in Table 1. This list of assumptions includes all information used in the modeling that was not specifically provided in the offers.

Combinations of the power supply options were made as necessary to minimize total expenses and meet the capacity requirements of UCU in the evaluation period. The timing and combinations of offers for the lowest cost cases are shown in Table 2 at the end of the report. Each case was run under two different scenarios. The first scenario allowed the energy not required by UCU to be sold. The sale price used in the model for

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9400 Word Parkway
Kamor City, Missouri 64114-3319
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Fax: 816-333-3690
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this surplus energy was the spot market price of energy less \$2.00/MWh. The spot market energy price forecast and the adjustment for the energy sales prices were provided by UCU. The energy to be sold could be provided by any available resources in each case modeled. The second scenario did not take into account the sale of surplus energy.

Table 3 shows the results of the RealTime modeling for the scenario with energy sales. The cases shown in the table represent the lowest cost cases developed by Burns & McDonnell. The lowest cost option includes a combination of purchases from Aquila, SPS, and a 55 MW unit-contingent purchase in the first twelve months of the study period and the addition of 500 MW of combined cycle capacity by UCU on June 1, 2001. This combination of resources results in total expenses of \$391,167,001, approximately \$25 million less than the next least expensive case which includes the same purchases and combined cycle units offered by LS Power.

The relative cost rankings change considerably if sales are not taken into consideration as shown in Table 4. The lowest cost case without sales of excess energy includes purchases from Aquila, SPS, and a 55 MW unit-contingent purchase in the first twelve months of the evaluation period and purchases from CP&L, Southern, NP Energy, and Aquila over the remaining three years. The case including the addition of combined cycle units by UCU has total expenses of approximately \$7 million more than the least cost case over the evaluation period.

We appreciate the opportunity to be of service to Utilicorp United. We would also like to express our appreciation for the cooperation we received from you and Mr. Roger Parkes during the evaluation process. If there are any aspects of the analyses that you wish to discuss, please do not hesitate to call us.

Sincerely,

Daniel A. Froelich, P.E.

Sand Q Froelit

Vice President

James M. Flucke, P.E.

Project Manager

Table 1 Assumptions Made for RealTime Modeling

Evaluation period - June 1, 2000 to May 31, 2004.

Capacity and demand forecasts for 2001-2004 provided by Utilicorp.

Spot market energy price forecast provided by Utilicorp.

MPS internal wheeling charges are assumed to the same for both generation built internal to the MPS transmission system and power delivered from outside the MPS transmission system.

MPS natural gas price forecast provided by MPS equals Henry Hub Index price forecast minus \$0.09/mm8tu plus \$0.35/mm8tu in transmission charges.

At the direction of Utilicorp, peaking capacity assumed to be available for \$4.00rkW-mo.

Sales of excess energy were made at the spot market energy price less \$2.00/MWh.

Information on 55 MW unit-contingent purchase provided by Utilicorp.

Aquila

Transmission charges of \$1,997/MW-mo. based on present transmission charges of Entergy and Ameren.

Basin Electric Power Cooperative

Carolina Power & Light

Cost of natural gas assumed to be equal to Utilicorp's cost of natural gas.

Assumed contract could start on June 1, 2001.

LS Power

The effect of the 10-year contract beyond the evaluation period has not been taken into consideration.

Cost of natural gas assumed to be equal to Utilicorp's cost of natural gas.

Assumed Availability Adjustment Factor equal to one for the second and third years of the contract.

Gross Domestic Price Deflator assumed to equal three percent.

NorAm

Transmission charge of \$998/MW-mo, based on present Ameren transmission charges and \$1.37/MWh provided by NorAm.

NP Energy

Market based hourly energy price forecast provided by Utilicorp.

Transmission charge of \$2,497/MW-mo. provided by Utilicorp.

Assumed tosses of 4.2% for both capacity and energy price provided by Utilicorp.

Energy price equals market based price forecast plus \$3.40/MWh in transmission charges plus 4.2% losses.

Southern Company

Cost of natural gas assumed to be equal to Henry Hub Index price forecast provided by Utilicorp.

Transmission charges of \$1,997/MW-mo. based on present transmission charges of Entergy and Ameren.

SPS

Option A assumed to be available for a one-year term based on discussions with Utilicorp.

Assumed transmission charges equal to \$4,033/MW-mp, provided by Utilicorp.

Capacity charges not included in model but were added to the total expenses on the "RealTime Modeling Results" spreadsheet. Assumed losses of 8.05% for both capacity and energy provided by Utilicorp.

Utilicorp United

Fuel costs based on heat rate curves and natural gas price forecasts provided by Utilicorp.

Combined-cycle capacity addition of 500 MW on June 1, 2001.

Capacity charge of \$5.50/kW-mo with no escalation assumed for CC units based on discussions with Utilicorp.

Operation & Maintenance cost forecast provided by Utilicorp.

Capacity charges not included in model but were added to the total expenses on the "RealTime Modeling Results" spreadsheet.

Table 2
Case 1 Description

| | | 7 | | | |
|--------------------------|----------|------------|------------|--------------|---------------------------------------|
| | | | Evaluati | on Period | • |
| | | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| | | to | to | to | to |
| Case 1 | | May, 2001 | May, 2002. | May, 2003 | May, 2004 |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 |
| | | | | | |
| Offered Capac | ity (MW) | | Capacity U | tilized (MW) | |
| LS Power | 540 | | 540 | 540 | 540 |
| ncn | 500 | | | | |
| Aquila 1a | 100 | 100 | | | |
| Aquila 1b | 75 | | | | · · · · · · · · · · · · · · · · · · · |
| Aquila 3 | 100 | | | | |
| SPS A | 75-100 | 75 | | | |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | | | | |
| NP Energy | 100 | | | | |
| Southern | 100 | | | | |
| CP&L | 150 | | | - | |
| NORAM | 100 | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | |
| Peaking Contract | | | | | |
| | | _ | | | |
| Total Capacity Addition | ns (MW) | 255 | 540 | 54D | 540 |
| Excess Capaci | ty (MW) | 0 | 135 | 100 | 60 |

Table 2 (Cont.) Case 2 Description

| · | | | | on Period | |
|--------------------------|----------|------------|--------------|--------------|------------|
|] | | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| | | to | to | to | to |
| Case 2 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 |
| Capacity Ne | ed (MW) | 255 | 4D5 | 44D | 48D |
| Offered Capac | ity (MW) | <u> </u> | Capacity U | tilized (MW) | |
| LS Power | 540 | | | | |
| UCU | 500 | | 500 | 500 | 500 |
| Aquila 1a | 100 | 100 | | | |
| Aquila 1b | 75 | 75 | | | |
| Aquila 3 | 100 | | | | · |
| SPS A | 75-100 | 75 | | | |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | | | | |
| NP Energy | 100 | | | | |
| Southern | 100 | | | | |
| CP&L | 150 | | | | |
| NORAM | 100 | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | |
| Peaking Contract | | | | | |
| Total Capacity Additio | ns (MW) | 255 | 500 | 500 | 500 |
| Excess Capac | ity (MW) | 0 | 95 | 60 | 20 |

Table 2 (Cont.) Case 3 Description

| | | | Evaluati | on Period | | |
|--------------------------|----------|------------------------|------------|---------------------------------------|-------------|--|
| | | | June, 2001 | June, 2002 | June, 2003 | |
| | | to | to | to | to | |
| Case 3 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 | |
| Offered Capac | ity (MW) | Capacity Utilized (MW) | | | | |
| LS Power | 540 | | | | | |
| UCU | 500 | | | | | |
| Aquila 1a | 100 | 100 | | · · · · · · · · · · · · · · · · · · · | | |
| Aquila 1b | 75 | 75 | | | | |
| Aquila 3 | 100 | | 100 | 100 | 100 | |
| SPS A | 75-100 | 75 | 100 | 100 | 100 | |
| SPS Peak | 25 | 25 | | | | |
| Basin | <=100 | | | | | |
| NP Energy | 100 | | | | | |
| Southern | 100 | | 100 | 100 | 100 | |
| GP&L | 150 | | 150 | 150 | 150 | |
| NORAM | 100 | | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | | |
| Peaking Contract | | | | | 30 | |
| Total Capacity Addition | ns (MW) | 255 | 450 | 450 | 480 | |
| Excess Capac | ty (MW) | 0 | 45 | 10 | 0 | |

Table 2 (Cont.) Case 4 Description

| | | | Evaluati | on Period | |
|--------------------------|-----------|------------|-------------|--------------|------------|
| | | June, 2000 | June, 2001 | June, 2002 | June, 2003 |
| | | to | to | · to | to |
| Case 4 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 |
| Offered Capac | the (Aman | | Conneitur | | |
| LS Power | 540 | | Capacity U | tilized (MW) | |
| UCU LCU | 500 | | | | |
| Aquila 1a | 100 | | | | |
| Aquila 1b | 75 | | | | |
| Aquila 3 | 100 | | | | |
| SPS A | 75-100 | 75 | 100 | 100 | 100 |
| SPS Peak | 25 | 25 | | | |
| Basin | <=100 | | | | |
| NP Energy | 100 | | 100 | 100 | 100 |
| Southern | 100 | | 100 | 100 | 100 |
| CP&L | 150 | | 150 | 150 | 150 |
| NORAM | 100 | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | |
| Peaking Contract | | | | | 30 |
| Total Capacity Addition | s (MW) | 255 | 450 | 450 | 480 |
| Excess Capaci | ty (MW) | 0 | 45 | 10 | 0 |

Table 2 (Cont.) Case 4a Description

| | | Evaluation Period | | | | | |
|--------------------------|----------|-------------------|------------|--------------|------------|--|--|
| | | June, 2000 | June, 2001 | June, 2002 | June, 2003 | | |
| | | to | to | to | to | | |
| Case 4a | | May, 2001 | May, 2002 | May, 2003 | May, 2004 | | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 | | |
| Offered Capac | ity (MW) | | Capacity U | tilized (MW) | | | |
| LS Power | 540 | <u> </u> | | | | | |
| UCU | 500 | | | | · | | |
| Aquila 1a | 100 | 100 | | | | | |
| Aquila 1b | 75 | 75 | | | | | |
| Aquila 3 | 100 | | 100 | 100 | 100 | | |
| SPS A | 75-100 | 75 | | | | | |
| SPS Peak | 25 | 25 | | | | | |
| Basin | <=100 | | | | | | |
| NP Energy | 100 | | 100 | 100 | 100 | | |
| Southern | 100 | | 100 | 100 | 100 | | |
| CP&L CP&L | 150 | | 150 | 150 | 150 | | |
| NORAM | 100 | | | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | | | |
| Peaking Contract | | ı | | | 30 | | |
| Total Capacity Addition | ns (MW) | 255 | 450 | 450 | 480 | | |
| Excess Capaci | ty (MW) | 0 | 45_ | 10 | 0 | | |

Table 2 (Cont.) Case 4b Description

| | | | Frankrist | - 0 | · · · · · · · · · · · · · · · · · · · | | |
|--------------------------|---------------|---|------------|-------------------|---------------------------------------|--|--|
| r | | Evaluation Period June, 2000 June, 2001 June, 2002 June, 2 | | | | | |
| į | | | | June, 2002 | June, 2003 | | |
| <u></u> | | to | · to | to | to | | |
| Case 4b | | May, 2001 | May, 2002 | May, 2003 | May, 2004 | | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 | | |
| Offered Capac | ity (MM/) | <u> </u> | Capacity | Allimont (Batter) | | | |
| LS Power | 540 | | Capacity U | tilized (MW) | | | |
| UCU | 500 | | | | | | |
| Aquila 1a | 100 | | | | | | |
| Aquila 1b | 75 | | | | | | |
| | | | <u> </u> | | • | | |
| Aquila 3 SPS A | 100 75-100 | | | | | | |
| SPS Peak | 25 | | | | · · · · · · · · · · · · · · · · · · · | | |
| Basin | | 25 | | | | | |
| | <=100 | | | | | | |
| NP Energy | 100 | | 100 | 100 | 100 | | |
| Southern Southern | 100 | · | 100 | 100 | 100 | | |
| CP&L | 150 | | 150 | 150 | 150 | | |
| NORAM | 100 | | 100 | 100 | 100 | | |
| Unit-Contingent Purchase | 55 | 55 | | | | | |
| Peaking Contract | | | | | 30 | | |
| Total Capacity Addition | ns (MW) | 255 | 450 | 450 | 480 | | |
| Excess Capaci | ty (MW) | 0 | 45 | 10 | 0 | | |

Table 2 (Cont.) Case 5 Description

| | | Evaluation Period | | | | | |
|--------------------------|----------|-------------------|-------------|--------------|------------|--|--|
| · | | June, 2000 | June, 2001 | June, 2002 | June, 2003 | | |
| | | to | to | to | to | | |
| Case 5 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 | | |
| Capacity Ne | ed (MW) | 255 | 405 | 440 | 480 | | |
| Offered Capac | ity (MW) | | Canacity II | tilized (MW) | | | |
| LS Power | 540 | | -apacity C | THE CANADA | | | |
| NCU | 500 | | | | | | |
| Aguila 1a | 100 | 100 | | | ····· | | |
| Aquila 1b | 75 | 75 | | | | | |
| Aquila 3 | 100 | | 100 | 100 | 100 | | |
| SPS A | 75-100 | 75 | 100 | 100 | 100 | | |
| SPS Peak | 25 | 25 | | | | | |
| Basin | <=100 | | | | | | |
| NP Energy | 100 | | 100 | 100 | 100 | | |
| Southern | 100 | | | | | | |
| CP&L | 150 | | 150 | 150 | 150 | | |
| NORAM | 100 | | - | | | | |
| Unit-Contingent Purchase | 55 | 55 | | | | | |
| Peaking Contract | | | | | 30 | | |
| Total Capacity Addition | ns (MW) | 255 | 450 | 450 | 480 | | |
| Excess Capaci | ty (MW) | Ō | 45 | 10 | 0 | | |

Table 2 (Cont.) Case 6 Description

| | | Evaluation Period | | | | | | |
|--------------------------|-----------|-------------------|-------------|-----------------|------------|--|--|--|
| <i>'</i> | | June, 2000 | June, 2001 | June, 2002 | June, 2003 | | | |
| | | to | to | to | to | | | |
| Case 6 | | May, 2001 | May, 2002 | May, 2003 | May, 2004 | | | |
| 0 | A /8414/1 | | | ··· | | | | |
| Capacity Nee | a (IVIVV) | 255 | 405 | 440 | 480 | | | |
| Offered Capacit | v (MW) | | Capacity I | tilized (MW) | | | | |
| LS Power | 540 | | | 1111222 (11114) | | | | |
| UCU | 500 | | | | · | | | |
| Aquila 1a | 100 | | | | | | | |
| Aquila 1b | 75 | 75 | | | | | | |
| Aquila 3 | 100 | | 100 | 100 | 100 | | | |
| SPS A | 75-100 | 75 | 100 | 100 | 100 | | | |
| SPS Peak | 25 | 25 | | | | | | |
| Basin | <=100 | | | | | | | |
| NP Energy | 100 | | 100 | 100 | 100 | | | |
| Southern | 100 | | 100 | 100 | 100 | | | |
| CP&L | 150 | | | | | | | |
| NORAM | 100 | | | | | | | |
| Unit-Contingent Purchase | _55 | 55 | | | | | | |
| Peaking Contract | | | 5 | 4D | 80 | | | |
| | | | | | | | | |
| Total Capacity Addition | s (MW) | 255 | 405 | 440 | 480 | | | |
| Excess Capacit | y (MW) | 0 | 0 | 0 | 0 | | | |

Table 2 (Cont.) Case 7 Description

| | Evaluation Period | | | | | | |
|----------|---|---|---|---|--|--|--|
| | June, 2000 | | | June, 2003 | | | |
| | to | to | to | to | | | |
| | May, 2001 | May, 2002 | May, 2003 | May, 2004 | | | |
| | <u> </u> | | • | , | | | |
| ed (MW) | 255 | 405 | 440 | 480 | | | |
| | | | | | | | |
| ity (MW) | Capacity Utilized (MW) | | | | | | |
| | | | | | | | |
| 500 | | | | | | | |
| 100 | 100 | | | | | | |
| 75. | 75 | | | | | | |
| 100 | | 100 | 100 | 100 | | | |
| 75-100 | 75 | 100 | 100 | 100 | | | |
| 25 | 25 | | | | | | |
| <=100 | | | | | | | |
| 100 | | | | | | | |
| 100 | | 100 | 100 | 100 | | | |
| 150 | | | | | | | |
| 100 | | 100 | 100 | 100 | | | |
| 55 | _ 55 | | | | | | |
| | | 5 | 40 | 80 | | | |
| | | | | | | | |
| ns (MW) | 255 | 405 | 440 | 480 | | | |
| | | | | | | | |
| ity (MW) | 0 | Ō | 0 | | | | |
| | ity (MW) 540 500 100 75 100 75-100 25 <=100 100 150 100 | 10 May, 2001 ed (MW) 255 ity (MW) 540 500 100 100 75 75 100 75-100 75 25 25 <=100 100 150 100 150 100 55 55 | June, 2000 June, 2001 10 to May, 2001 May, 2002 red (MW) 255 405 ity (MW) Capacity U 540 500 100 100 75 75 100 100 75-100 75 100 25 25 <=100 100 100 150 100 100 55 55 5 ns (MW) 255 405 | June, 2000 June, 2001 June, 2002 10 to to May, 2001 May, 2002 May, 2003 red (MW) 255 405 440 ity (MW) Capacity Utilized (MW) 540 500 100 100 75 75 100 100 100 75-100 75 100 100 25 25 <=100 100 100 100 100 150 100 100 100 150 100 100 100 155 55 5 40 ns (MW) 255 405 440 | | | |

Table 3 ResiTime Modeling Results with Sales
June 1, 2000 to May 31, 2004

| Cate | Centract | Capacity M/y/ | Energy Amen | Cest | Tatal Fundamen J | Total Seira J | Total Constitute Coal S | Torsi Express 1 | | J Abbus Louis Espensive Case |
|--------------|---|--------------------|----------------------|--|---------------------|------------------|----------------------------|-------------------------|----------|---------------------------------|
| Care I | | | | - 1 | 1 389.912.625 | -5244,107,124 | | 3 415 751,346 | | 5 23,744,747 |
| | US Parent Unit 1 (Online 2461) | 7.0 | | 172,351,627 | | | | | | |
| | (S Person Use 2 (Online 2001) | 276 | 5213,847 26 | 156,023,310 | • | | | | |] |
| 1 | Aquile Option 15 6/1/2000 - 6/1/2000 Aquile Option 16 10/1/2000 - 8/31/2001 | 75 | i | 7,641,200 | | | | | ì |] |
| • | SPS Detain A Parkel Name or annual | 751 | 10,646 | 1,720,003 | . 1 | | | | , | <u> </u> |
| | (Peering Copedity) (Unit-Consingent Programs | 25 55 | | 3,124,0AL | ł | | | ł | ĺ | |
| | Sules | | 4 128 177 | €241,181,134 | | | | | l | L 1 |
| 2 | LANGSup (Juli 1 (Challes 2001) | 3347 | 5385 140 | 148,50(,56) | 3 \$4,505,405 | -1723,947,14E | 3 363,146,241 | 1 291,167,051 | Ç.074 | · · |
| 1 | (believe first 7 of Person Will) | 230 | 1,741,547 | 124,012 446 | Ī | | | | | l - |
| | Aguilla (Option 1s 67)/2000 - 9/20/2000 | 104 | 160 | 4,809,452 | ! | | | J , | l | 1 |
| į . | Aquille Option 18 13/1/2000 - \$75/2/2001 SCPS Option A (Purised Responsement) | 75 | | 10,074,017 | i i | | | 1 | 1 | 1 í |
| 1 | (Peoples Corecity) | - 8 | 11,105 | 3,721,497 | | 1 | | (| (, | . (|
|] | Unit Continues Postines | - 55 | 12,724 |),726,497 3,110,349 -5229,449,144 | ! | i | | | 1 | , , |
| Cese > | | J | | | 3 250.7 (5,240) | JUS 277 363 | 3 212 101,747 | 1 416 161 764 | 11 856 | 9 65 (66 70) |
| | 5Pu | 150 | 772,644 | 14,001,140 59,884,788 1 44,207,228 | | | | | | |
| <u> </u> | Audi Cotton 3 | 100 | 2,040,274 | 20,000,730 74,570,554 | ! | | | | | [|
| 1 | And Order to 4/1/2000 - 9/30/2000 | 100 | 172 | \$ 4,611,451 } | , | | | | | l i |
| ļ | Aquille Diplican 18 10/1/2000 - 9/35/2001 SP 3 Option A (Partie Requirement) | 7 | | 1,641,290 | ! ì | | 1 | 1 | 1 | í |
| 1 | (SP3 Option A Printed Requirement) | 74.HM | Z732,866 | 1 17,711,915 4 1,730,045 | (| | | | | ! { |
| [| (Panishe Capacity) Unit Cardingers Peachana | <u> </u> | 13,002 | 3,127,522 | l | | | |] | 1 |
| 1 | Pushing Contract | 1 | 2 607 400 | \$ 1 440 000 41 15 277 283 | ,) | | | | | } } |
| Case 1 | | | | | 1 2(2,0)4,491 | 4115,379,300 | \$ 292.794.345 | 1 430,381,374 | 10 112 | S 30 594,373 |
| , <u>-</u> - | CP44 | 160 | 771,F00 | 3 35.011,240 5 55.600,670 | | | 7.00 | | | |
| 1 | B-mahama | 190 | 2,035,007 | \$9,800,870 | } | | | |] | } |
| 1 | Agele Option is 67-2000 - 6730/2800 | 192 | 164 | 14,021,00 | i 1 | 1 | | | . 1 | |
| 4 | Ageile Option 19 10/1/2000 - \$/35/2021 | 73 | | 1 17 A22 a64 | ĺ | | | | | [|
| 1 | EPS Detan A (Parks) Requirements | 75/190 | 2/35,919 | \$7,822,854 | ! } | j | | 1 | | |
| 1 | (Pedding Capatricy) Linit-Curringural Puntrana | 75. 55 | 12,406 | 1,724,163 1,121,740 | i } | | | |) 1 | 1 |
| 1 | (Pushing Conjuct | 1 | | 7,441,500 | | ĺ | | | | |
| <u></u> | Barbara . | | -1,500,357 | -1113,176,594 | \$ 207,634,425 | -474,252,010 | W | E 494 6 14 14 1 | | أجيبيا |
| Cana 49. | cru. | 184 | 294,326 | <u>i 20,010.171</u> | | ¶ (H/747 ت ، ب | g , pro./46379 | 1 1767-11902 | 11,6% | 4 34 34 |
| 1 | (Lasting) | 100 | 1,094,111 | 40,041,094 40,041,094 16,001,001 | i (| ļ | | | | ! ! |
| Į | AP Energy August Option 1g 6/1/2000 - 9/30/2000 August Option 19 10/1/2000 - 5/31/2001 | 1 2 | 19,763 | | ! ! | j | | | | r 1 |
| 1 | Agesta Option 19 IO/s/2000 - S/3 1/2001 | 73 | | 1,540,200 | | 1 | | | | 1 |
| 1 | Se S Codon & (Purkel Requirement) | 75 | 131 MATIN | 1 34,370,445 1 18,850,715 | ¦ , | | • | | | , , |
| { | (Posting Capacity) | 230 | 18,823 12,766 | 1,771,784 | ì | | | | | i |
| ı | Last Continged Partition | 33 | | | ! ! | | 1 | | | ; ; |
| i | Subman Combined | | - Q - 3,881.867 | 1 1,441,000 476,232,814 | į 1 | | 1 | | | , |
| Cave 4h | | | | | £ 245,856,964 | 1191 527 5211 | \$ 294,063,094 | \$ 448,176, 10 0 | 12.5% | \$ 43M.CP |
| | CALL Seathern | 100 | 249,141 2 (85,144 | 154,000,021 144,101,324 | <u> </u> | | | | | |
| | HAP Emergy | I ĐQ | 5,746 | \$ 16,013,177 |] | i | | 1 | | } |
| | Aguille Ogrann To \$112004 - \$1072000 Aguille Ogrann 10 10/1/2000 - \$131/2001 | 75 | - 16 | 1 1540.350 | · ' | | | | i | |
| ł | Plant an | 180 | 1,524,514 | 1 77.332.404 | | i | i i | | | ' 1 |
| 1 | \$P & Option A (Person Requirement) | 75 | 348,547 | 3 16,002,792 | | | | ì | | 1 |
| 1 | Project Constant | - 3 | 12,424 | 2 1,720,933 3 3,176,661 | } | | 1 | | | 1 |
| | Unit Contingent Purphyog Postong Contract | | | | | | | | | ! ! |
| | Selet | | -4,871,939 | 4194,544,436 | 4 900 100 22 | | | | |] |
| Cete 3 | CPAL | 739 | 794 3011 | 35,784,707 | 1 227,195,649 | -E11 MOH 448 | . MI,LI2976 | 1 450 527 569 | (5.7% | 1 434.50 |
| 1 | Aquila Option 3 | 1981 | 104 | 3 2134 544 | | | i | | | ļļ |
| l | Afficial Agent (a. 6/1/2000 - 9/20/2000 | 188 | 16,173 | 3 12 764 500 | | |] | | | |
| 1 | April Option 10 10/1/2000 - 3/21/2001 | 75 | 6 | 1 15 1 340 | | |] | | | } } |
| 1 | Aquil Option 1p 10/1/2000 : 1/21/2001 EPS Option A (Punit of Requirement) | 75/100 | 1,736,656 | 1 67,514,647 | , | | | | | , t |
| [| Purling Coperaty) Unit Contingent Prochage | 75 | | 3 1,778,183 3 3,123,746 | | | | | | i |
| ! | Probing Cathrost | | | 3 (,440,085 | | |] | | | Ĭ |
| <u></u> | Sales | | 3,757,545 | 311,105,44 | | | | ا | | <u> </u> |
| Care \$ | Aquilis Option 3 | 190 | | 3 24,374,734 | 1 249,212,528 | -1107 003 417 | 1 297,854,110 | 1 434,276,021 | () 6% | 1 43 109 076 |
| J | ACP Energy | 199 | 13,400 | \$ 18,673,562 | İ | : | | ! 1 |] | ;) |
| 1 | Southarts | 180 | 7 (25) 807 | 3 37,450,952 | 1 | ! | | 1 | ļ ! | ∖ |
| { | Aquilla Djelleri 18 6/1/2006 - 6/30/2000 Aquilla Djelleri 16 10/1/2000 - 5/21/2001 | 75 | | 3 4 515 156 3 1.648.200 | [| | į | | | [1 |
| { | SPS Option A (Postlal Requirement) | 75/150 | 2 735 959 | 3 9717764 | ļ i | | | | | !] |
|] | [Pyeling CapeChy] | 25 | 10,904 | 1 1,726,143 | | ľ | ' | | 1 | i 1 |
| 1 | Link-Contingent Pumpus y Posting Contract | 5.5 | 12,406 | 3 122,74 | | · i | i | | | ļ l |
| L | Sales | | 4.401.647 | \$ 1,726,36,3 3 3,123,744 \$ 6,000,000 -\$167,642,417 | | • | | _ | [|] |
| Case 7 | | | | | | 1140 445 174 | \$ 217,944,365 | 1 444,563,186 | 13.7% | 5 \$3,306,105 |
| i _ | Seathers Aquity Option S | 190 | 2,034,417 136 | \$ 99.654.506 \$ 21,377,567 \$ \$1,142,956 \$ 661,929 \$ 1,449,200 | 1 | | _ | i i | | } .] |
| | | 186 | 1,475,468 | \$ \$1,142,950 | | | | | | Į |
| Į. | Monthage | | - 321 | 1 (.401.121 | l | ļ | Ì | | l i | ìÌ |
| } | Aqualy Option 1 a 4/1/2000 - 8/30/2000 | 186 | | | | | | | | |
| | Aqualy Option 1 a 4/1/2000 - 8/30/2000 | 73 | 2,734 120 | 3 1,649,200 3 97,925,444 | | | | | | } { |
| | Aquato Option 1 p 61/2000 - 8/36/2000 Aquato Option 1b Sty 1/2600 - 6/31/2001 SP's Option A (Aprille Page Arment) SP prints Coprints | 73 15/(86 25 | 2,730,74 | \$ 1,725,744 | l i | | | | | |
| | Aguar Option 1 6 1/2000 9/20/2000 Aguila Option 19 10/1/2000 6/21/2001 SPS Dation A (Agrice Regularement) Profiling Cophology Unit Commissional Profiling | 73 75/100 | 2,730,74 | \$ 1,725,744 | l i | | | | | |
| | Aquato Option 1 p 61/2000 - 8/36/2000 Aquato Option 1b Sty 1/2600 - 6/31/2001 SP's Option A (Aprille Page Arment) SP prints Coprints | 73 15/(86 25 | 19,423 12,786 | 4 27.122.444 | | | | | | |

Table 4 RealTime Modeling Results without Sales

| Case | Cantract | Capacity MW | Energy acom | Cost \$ | Total Participes \$ | Total Generations Cost 3 | Total Expense S | % Above Least Expensive Case | S Above Least Expenses Care |
|---------------|---|--|--|--|------------------------|-----------------------------|----------------------------------|---------------------------------|--------------------------------|
| Case 1 | | | | | 5 247 482 DEL | 5 225,719,801 | 3 476,201,835 | 4,3% | 3 22.182.486 |
| | LS Prover Unit 1 [Online 2001) | 270 | | 128,875,414 | | | | | |
| | LS Power Unit 2 [Online 2001] | 270 | | 79,414,823 | ļ | | Į | ł | Ì |
| | Aquita Option 1x 5/1/2000 - 9/30/2000 Aquita Option 15 10/1/2000 - 5/31/2001 | 100 | 26 | | | | Ī | ł | |
| | SPS Option A (Partial Regularization) | 175 | 125 808 3 | 1,548,200 | | | ł | | İ |
| | (Pending Capacity) | 25 | 10,918 | | | 1 | ١ | } | 1 |
| | Unit-Conferent Purchase | 33 | 9,776 | | | į | ĺ | J | |
| Case 2 | | | | | 3 44,330,325 | 3 423,306,758 | 3 467,639.684 | 3 0% | \$ 13,620,264 |
| | Usicorp Unk f (Online 2001) | 250 | 2,380,441 | 120,708,610 | | | | | - 1204030 |
| | Unicorp Unit 3 (Online 2001) | 250 | | 77,748,906 | | | 1 | | |
| | Aguilla Opeion 1s 6/1/2000 - 9/30/2000 | 100 | | 4.814,D17 | | | 1 | i | |
| | Aguille Ciption 10 10/1/2000 - 5/31/2001 | 75 | 0 3 | | 1 | | 1 | 1 | |
| | (SPS Option A (Pectal Requirement) (Peeting Capacity) | | 11,078 | 12,397,030 | | | · ' | 1 | i |
| | Unit-Contingent Functions | | 9,350 | | | | [(| ľ | |
| Case 3 | | | - [| 3,214,143 | 3 194 153,051 | 3 361 065 040 | 3 481,154,001 | 1.0% | |
| - | CPAL | 150 | (co.jec) | 20,771,130 | | 29-,000,000 | 301,100,201 | 1,876 | 3 7,134,601 |
| | Southern | 100 | | 30,572,000 | | | | | |
| | Aquita Option 3 | 100 | | 74,273,182 | | | ŀ |] | |
| | Aquita Option 1a 6/1/2000 - 900/2000 | 100 | | 4,601,529 | | | | | |
| | Ageila Opelas to 1011/2000 - 5/31/2001 | 75 | e | | | | | | |
| | SPS Option A (Paritel Requirement) (Penting Copacity) | 75/100 | 1,427,437 | 71,756,138 | | | | [| |
| | Unit-Contingent Parchage | 33 | 9,891) 5 | | | | i | | |
| | Pastino Contract | ┤╌╌┈╌ ┞╴ | e : | |] | | | | |
| Case A | | | | | \$ 180,157,020 | \$ 264,956,444 | 1 455,123,464 | 0.2% | \$ 1,104,054 |
| | CPSL | 150 | | 20,600,735 | | | | _ | |
|) | Seuthern | 100 | | 36,457,450 | l 1 | • | | | |
| | NP Energy | 100 | | 14 644 070 | | | 1 | | |
| | Aguille Option 1s 6/1/2000 - 9/30/2000 Aguille Option 1b 10/1/2001 - 5/31/2001 | 75 | 26 1 | | | | | 1 | |
| ļ | SPS Option A [Parkst Requirement) | 75/100 | | 1,648,200 71,770,826 | | | | ŀ | |
| | (Fusing Copacity) | 757.00 | 19,895 1 | | | |] |] | |
| | Unit-Contingent Purchase | 53 | 9,521 | | | | | | |
| !' | Peaking Contract | | 0 1 | | L | 1 | | [| |
| Case 48 | | | | | 1 (73,655,92) | 280,363,477 | \$ 454,019,400 | 0.0% | 3 |
| | CPAL | 150 | | 20,995,167 | | | | | |
| | NP Energy | 100 | | 43,749,950 19,007,529 | | | | | 1 |
| | Aguila Option 1a 9/1/2000 - 9/30/2000 | 790 | | 4,001,524 | | | | 1 | |
| | Acusta Option 10 10/1/2000 - 5/31/2001 | 73 | | | |] |] | Ì | |
| | Apple 3 | 100 | | 24,270,645 | | | | ł | |
| l ' | SPS Option A (Pantal Requirement) | 75 | 172,579 1 | | | 1 | | | |
| 1 | [Pecking Capacity) | 72 | 10,894 1 | | | i | ' i | | ' |
| 1 | Unit-Contingent Purchase | 5.5 | 9,921 1 | | ì | | | i | |
| | Peaking Contract | | 9/ : | 1,440,000 | * **** | | | | |
| Case 40 | CPM | 190 | 45 542 (| 28.631,813 | \$ 190,348,728 | 5 270,494,940 | \$ 480,842,768 | 1,5% | \$ 4,823,368 |
| | Smitheth | 100 | | 43,918,072 | | | | | |
| | MP EMPRY | 100 | 6,754 | 18.591,725 | | | | | |
| 1 1 | Aquita Option 1a 6/1/2000 - 9/30/2000 | 100 | | 4,801,529 | | | | 1 | |
| | Aguile Option 15 10/1/2000 - 5/31/2001 | 73 | <u></u> | | i | | | | |
| 1 | North Control | 100 | 647,710 1 | | | | | | |
| | SP5 Option A [Pertal Requirement] | 23 | 10,910 | 12,420,153 | | | | | |
| 1 | (Peaking Capacity) Unit Conlinged Parchase | -55 | 0,776 1 | | ì | | | 1 | |
| | Feeling Contract | | 9 1 | | l l | 1 | i | i | |
| Cone 5 | | | -1. | | | | | | |
| | CPAL | 7.00 | | | S 1791,2020.857 I | 3 27# 177 1== 4 | L 489 37E 774 | - 222 | 4 15 755 650 |
| | | 150 | 125,2451 2 | 30,504,582 | \$ 191,200,852 | 3 278,177,202 | \$ 409,378,734 | 3.4% | \$ 15,354,634 |
| | Aquile Option 2 | 100 | | 30,504,582 24,370,845 | \$ \$91,200,852 | 5 270,177,282 | \$ 489.375.234 | 3,4% | \$ 15,354,834 |
| | Aquila Option 3 NP Energy | 100 | 13 (J 18,990 1 | 24,370,445 | 5 191,200,852 | 3 278,177,282 | \$ 409.37E.234 | 3,4% | 5 15,254,834 |
| | Agulla Option 3 (IP Energy Agulla Option 5s 6/1/2000 - 9/30/2000 | 100 900 100 | 13 1 18 990 1 26 | 24,370,045 18,991,617 4,801,529 | 5 (91,200,052 | 5 <u>278,177,382</u> | \$ 489.375,234 | 3,4% | \$ 15,354,634 |
| | Aquile Option 2 (RF Energy Aquile Option 5s 6/1/2000 - \$/30/2000 Aquile Option 5b 10/1/2000 - \$/30/2001 | 100 900 100 75 | 131 J 18,990 1 26 0 | 24,370,645 18,991,617 4,801,529 1,648,200 | 5 191,200,052 | \$ 27a,177,182 | \$ 469.37E,234 | 3,4% | \$ 15,254,634 |
| | Aquila Option 3 (AP Energy Aquila Option 5 = 6/1/2000 - 8/30/2000 Aquila Option 15 10/1/2000 - 5/31/2001 SPS Option A (Pacital Requirement) | 100 100 100 75 75/100 | 131 J 18,990 2 26 3 0 1 1,525,643 2 | 24,370,445 18,991,617 4,801,529 1,648,200 73,874,603 | \$ \$91,200,652 | 5 278,177,182 | E 489.37E.234 | 3.4% | \$ 15,254,634 |
| | Anglio Option 2 RP Energy Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1b. 1071/2000 - SF31/2001 SPS Option A (Penting Requirement) (Penting Capacity) | 100 400 100 75 75/100 | 131 18,990 126 26 1,525,643 1 10,885 1 | 24,370,645 18,991,617 4,801,529 1,648,200 73,874,601 1,774,424 | \$ 691,200,632 | 5 278,177,182 | \$ 469.37E,234 | 3.4% | \$ 15,354,634 |
| | Aquila Option 3 (AP Energy Aquila Option 5 = 6/1/2000 - 8/30/2000 Aquila Option 15 10/1/2000 - 5/31/2001 SPS Option A (Pacital Requirement) | 100 100 100 75 75/100 | 131 J 18,990 2 26 3 0 1 1,525,643 2 | 24,370,645 18,991,617 4,801,529 1,648,200 73,874,601 1,774,424 | \$ 691,200,632 | 5 270,177,202 | E 409.37E.234 | 3,4% | \$ 15,254,634 |
| | Anglio Option 2 RP Energy Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1b. 1071/2000 - SF31/2001 SPS Option A (Penting Requirement) (Penting Capacity) | 100 400 100 75 75/100 | 131 18,990 126 26 1,525,643 1 10,885 1 | 24,370,645 18,991,617 4,801,529 1,648,200 73,874,601 1,774,424 | | | | | |
| Care II | Anglio Option 2 RP Energy Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1s. SF1/2000 - SF20/2000 Anglio Option 1b. 1071/2000 - SF31/2001 SPS Option A (Penting Requirement) (Penting Capacity) | 100 400 100 75 75/100 | 131 18.990 1 26 0 1 1,525,643 1 10,685 6 9,821 0 1 | 24,370,645 18,991,617 4,801,529 1,648,200 73,874,601 1,774,424 | \$ 192,604,455 | | \$ 469.378,234 \$ 454.095,973 | 3.4% 3.4% | |
| Care B | Anuto Option 2 RP Energy Angalo Option 1s | 100 100 100 75 75/00 23 55 100 100 | 131 18,990 3 26 3 3 3 3 3 3 3 3 3 | 24,370,645 18,891,617 4,801,529 1,648,200 73,874,603 1,774,424 3,020,839 1,440,000 24,377,567 18,899,639 | | | | | |
| Care I | Angle Option 2 RP Energy Angle Option in Efficion 9/20/2000 Angle Option in Efficion 9/20/2000 Angle Option 10 10/1/2000 - 5/31/2001 EPS Option A (Pential Requirement) (Ped log Capacity) Unit-Certifiqued Parchase Peaking Catherts Acyelic Option 3 RP Energy Southers | 100 100 175 175/100 23 25 25 100 100 | 131 18,990 1 26 90 1,525,643 2 10,693 3 9,921 2 0 14527 14527 933,112 3 | 24,370,645 U.891,617 4,691,529 1,648,200 73,874,603 1,774,424 1,774,424 1,440,000 24,377,567 1,489,618 36,437,442 | | | | | |
| Carre II | Angelia Option 2 (AP Energy Appelia Option 1s S11/2000 - \$720/2000 Angelia Option 1s S11/2000 - \$720/2000 Angelia Option 1s S11/2000 - \$720/2001 SPS Option A (Pening Respirement) (Ped Ling Capacity) Unit Confinge of Purphase Peoblog Consect Appelia Option 3 RP Energy Southern | 100 100 175 75/100 33 55 100 100 100 | 131 18,990 1 26 2 0 1,525,643 1 10,985 2 9,921 2 0 1 14,527 2 933,112 2 | 24,370,645 18,991,617 16,601,529 1,644,200 1,724,424 2,027,639 1,440,000 24,377,567 13,899,611 36,437,442 4,001,529 | | | | | |
| Case II | Anglia Option 2 RP Energy Anglia Option 11 | 100 100 100 130 133 75/100 23 55 55 100 100 100 100 75 | 131 18 18 18 18 18 18 18 | 24,370,645 iii,391,617 iii,391,617 ii,440,200 ii,73,874,603 ii,774,403 ii,774,403 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 iii,140,000 | | | | | |
| Case II | Anglia Option 2 RP Energy Anglia Option in Effizioni 9/20/2000 Anglia Option in Effizioni 9/20/2000 Anglia Option in Effizioni 9/20/2000 Anglia Option in 10/1/2000 - 5/31/2001 EPS Option A (Pential Requirement) (Peet ling Capacity) Unit-Cartingard Purchase Peobling Contract Anglia Option 3 RP Energy Anglia Option in 4/1/2003 - 8/30/2000 Agrila Option in 10/1/2003 - 5/31/2001 SPS Option A (Pential Requirement) | 100 100 100 75 75/00 23 55 100 100 100 100 75/100 | 131 18,990 25 26 26 27 27 27 27 27 27 | 24,370,445 18,91,617 4,801,529 1,942,508 73,874,503 1,774,454 3,029,539 1,440,500 24,377,567 13,89,611 38,437,442 4,801,529 1,840,200 71,770,653 | | | | | |
| Cree II | Aguilla Option 2 (AP Enerty Apulla Option 1s S11/2000 - \$720/2000 Aguilla Option 1s S11/2000 - \$720/2000 Aguilla Option 1s S11/2000 - \$731/2001 SPS Option A (Pential Requirement) (Peating Capacity) Unit-Certingard Purchase Peating Centeret Aguilla Option 3 Aguilla Option 3 Aguilla Option 3 Aguilla Option 1s G71/2003 - 8730/2000 Aguilla Option 1s G71/2003 - 8730/2000 Aguilla Option 1s G71/2003 - 8730/2001 SPS Option A (Peatin Requirement) (Peating Capacity) | 100 100 100 130 133 75/100 23 55 55 100 100 100 100 75 | 121 18,960 25 1,325,643 10,865 1,325,643 10,865 1,325,643 1,325,643 1,325,643 1,327 1,32 | 24,370,645 18,91,617 4,801,529 1,648,200 1,744,624 2,029,639 1,440,000 24,377,567 18,839,618 36,457,442 1,648,200 71,770,663 | | | | | |
| Circ II | Anglia Option 2 RP Energy Anglia Option in SF1/2000 - SF20/2000 Anglia Option in SF1/2000 - SF20/2000 Anglia Option in SF1/2000 - SF20/2001 SPS Option A (Pential Requirement) Penting Connecty Unit-Corringent Purphase Penting Connect Anglia Option 3 Applia Option 3 Applia Option 10 Anglia Option 10 SPS Option A (Pential Requirement) (Penting Copenty) Unit-Connection | 100 100 100 130 13 15 15 100 100 100 100 100 100 | 131 18,990 25 26 26 27 27 27 27 27 27 | 24,370,645 18,391,617 18,791,617 18,742,603 1,774,424 2,227,7467 18,499,619 36,437,442 4,001,529 1,744,200 1,74 | | | | | |
| Care B | Aguilla Option 2 (AP Enerty Apulla Option 1s S11/2000 - \$720/2000 Aguilla Option 1s S11/2000 - \$720/2000 Aguilla Option 1s S11/2000 - \$731/2001 SPS Option A (Pential Requirement) (Peating Capacity) Unit-Certingard Purchase Peating Centeret Aguilla Option 3 Aguilla Option 3 Aguilla Option 3 Aguilla Option 1s G71/2003 - 8730/2000 Aguilla Option 1s G71/2003 - 8730/2000 Aguilla Option 1s G71/2003 - 8730/2001 SPS Option A (Peatin Requirement) (Peating Capacity) | 100 100 100 130 13 15 15 100 100 100 100 100 100 | 121 18,960 25 3 18,960 18,960 25 3 18,960 | 24,370,645 18,391,617 2 4,801,529 1,648,200 1,774,424 2,227,539 2 4,470,600 2 4,377,667 18,899,619 50,437,442 4,801,529 1,170,663 1,170,663 1,170,663 1,170,633 | \$ 192,004,455 | 3 755,198,514 | \$ 454 095,973 | d.SPAC | 3 4,977,573 |
| Care 8 | Anglia Option 2 RP Energy Anglia Option in ST1/2000 - \$720/2000 Anglia Option in ST1/2000 - \$720/2000 Anglia Option in ST1/2000 - \$731/2001 SPS Option A, (Pential Requirement) (Ped Ling Capacity) Unit-Cartingard Partynaia Peaking Cotton 3 RP Energy Southern Anglia Option 13 RP Energy Southern Anglia Option 10 RP Energy Southern Anglia Option 10 SPS Option A (Partial Requirement) (Peaking Capacity) Unit-Confingent Parchasa Peaking Cartingar Peaking Capacity) Southern | 100 100 100 75 75 75/00 33 35 55 100 100 100 73 75/00 25 55 | 121 18,950 25 26 27 27 27 27 27 27 27 | 24,370,645 14,391,617 14,391,617 14,491,617 173,474,620 1,774,424 2,2774,620 1,440,500 24,377,667 19,499,618 4,601,529 1,744,200 71,770,667 1,724,424 1,640,200 71,770,663 | | 3 755,198,514 | | d.SPAC | 3 4,977,573 |
| Case 7 | Angelia Option 2 (AP Enerty) Appelia Option 1s S11/2000 - \$720/2000 Appelia Option 1s S11/2000 - \$720/2000 Appelia Option 1s S11/2000 - \$720/2000 Appelia Option 1s S11/2000 - \$720/2001 SPS Option A (Pential Requirement) (Peating Capacity) Unit-Confingent Purchase Peating Option 3 Appelia Option 3 Appelia Option 1s S11/2000 - \$130/2006 Appelia Option 1s S11/2000 - \$13 | 100 100 100 175 175 175 175 100 100 100 100 100 100 100 100 100 10 | 12(1) 18,960 26 27 1,525,643 10,885 9,821 10,885 14,527 933,112 10,885 11,423,641 10,885 11,423,641 10,885 11,423,641 10,885 11,423,641 10,885 11,423,641 10,885 11,423,641 | 24.370.645 14.391.617 14.391.617 14.490.529 1.44.603 1.774.634 1.774.634 1.440.500 1.4 | \$ 192,004,455 | 3 755,198,514 | \$ 454 095,973 | d.SPAC | 3 4,977,573 |
| Case II | Angele Option 2 NP Energy Angele Option 1s | 100 100 100 75 75 75 75 100 100 100 100 100 100 100 10 | 121 18,960 25 3 18,960 25 3 18,960 3 3 18,960 3 3 18,960 3 3 18,960 3 3 18,960 3 3 18,90 3 3 18,90 3 3 3 3 3 3 3 3 3 | 24,370,645 118,391,617 14,891,617 1,724,424 2,3220,539 1,440,500 24,377,567 18,899,611 36,437,442 4,801,529 1,944,200 71,776,657 1,948,200 71,776,657 1,948,200 24,277,567 24,277,567 24,277,567 24,277,567 24,277,567 24,277,567 24,477,567 24,477,567 24,477,567 24,477,567 24,477,567 | \$ 192,004,455 | 3 755,198,514 | \$ 454 095,973 | d.SPAC | 3 4,577,573 |
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| Case 7 | Angele Option 2 RP Energy Angele Option 1s | 100 100 150 150 150 150 150 160 160 160 173 174 160 160 160 173 174 160 160 160 173 174 160 160 175 175 175 175 175 175 175 175 175 175 | 12(1) 18,960 26 27 1,325,643 10,895 9,821 14,527 14,527 12,112 23,112 10,895 1,422,247 10,895 1,422,247 10,895 1,422,247 10,895 1,422,247 10,895 1,422,247 10,895 1,422,247 | 24,370,463 118,191,517 118,191 | \$ 192,004,455 | 3 755,198,514 | \$ 454 095,973 | d.SPAC | 3 4,677,571 |

Rigids SPS Option A Partial Requirement has a sapacity of 75 toW for the first year and 100 toW for the fast tyres years SPS Option A was only laken for any year for cases 1, 2, 4s, and 4b Pushing Contests includes a capacity charge of \$4,000fW/ma, for all capacity delicits

Highly Confidential

Interview of UtiliCorp

Regulated Utility Operations Personnel

Frank DeBacker

Robert Holzwarth

Dated: October 28, 2003

AQUILA, INC. CASE NO. ER-2004-0034 MISSOURI PUBLIC SERVICE COMMISSION **DATA REQUEST NO. MPSC-548**

DATE OF REQUEST:

November 17, 2003

DATE RECEIVED:

November 17, 2003

DATE DUE:

December 7, 2003

REQUESTOR:

Mark Oligschlaeger

BRIEF DESCRIPTION:

Aries Power Plant

QUESTION:

Please review the attached set of notes taken by Staff of Aquila representations made at the meeting between Staff and Aquilla representatives on Oct. 28, 2003, concerning the Aries power plant. Please make any revisions or additions necessary to accurately convey what Mr. DeBacker and Mr. Holzwarth stated during this meeting.

RESPONSE:

Attached is a revised set of notes.

ATTACHMENT:

MEETING NOTES of interview of Missouri Public Service personnel - revised Nov. 20, 2003.

ANSWERED BY: Frank DeBacker

SIGNATURE OF RESPONDENT

AQUILA INC Case No. ER-2004-0034 HIGHLY CONFIDENTIAL

MEETING NOTES of interview of Missouri Public Service personnel

Attending from Missouri Commission Staff: Cary Featherstone, Mark Oligschlaeger Attending from Aquila: Frank DeBacker, Robert Holzwarth, Denny Williams

Location: Aquila Headquarters -- 200 West 9th, downtown Kansas City, Mo.

Date: October 28, 2003

Time: 9:45 am to 1:30 pm

(Note: References to "Aquila" generically refer to both the current organization and the organization known as "UtiliCorp United" prior to the name change to Aquila in 2002. References to the merchant operations of Aquila will be specifically referred to as "Aquila Merchant.")

Frank DeBacker retired from Aquila on June 30, 2001. Since then, he has worked part-time with Burns & McDonnell. He is currently working part-time for Aquila as a consultant in relation to the current Missouri rate case (Case No. ER-2004-0034). He was brought back as a contractor to specifically respond to the Staff's inquiry into the purchased power capacity contract with the Aries Partners. In 1998-99, Mr. DeBacker held the position of Vice-President – Fuel and Purchased Power on Aquila's regulated side. He reported then to Robert Holzwarth. Mr. DeBacker had coal, freight and purchased power under his authority. He did not have natural gas, which was done in Omaha, NE. Phil Rogers worked with Mr. DeBacker on the acquisition of coal supply for the regulated generating units.

Mr. DeBacker originally came to Aquila (Utilicorp) when the Company acquired the electric properties of Centel in early 1990s. He came from Colorado to Missouri in mid 1990s (to Kansas City in June 1995). He was in charge of power supply resources for Missouri, Kansas and Colorado from 1996 through June 2001.

The electric regulated operations of Aquila consist of Missouri Public Service (MPS) (and as of January 2002, St. Joseph Light & Power) operating in state of Missouri, West Plains of Kansas (WPK) operating in state of Kansas and West Plains of Colorado (WPC) operating in eastern side of Colorado.

Mr. Holzwarth is still employed full-time with Aquila, and is currently between assignments; he recently returned from Australia as where he was CEO of United Energy. In 1998-99, Mr. Holzwarth was Vice-President/General Manager – Power Services (UPS) on Aquila's regulated side. He reported to Harvey Padawer, who was a Senior Vice-President with Aquila (UtiliCorp). Mr. Padawer reported to Bob Green, UtiliCorp President. Mr. Padawer is no longer with Aquila or any its affiliates. Mr. Featherstone stated that Mr. Green is still on the Aquila payroll. Mr.

Holzwarth left Missouri in 2000 to take a position with Aquila's Canadian operation in Calgary. He left Canada for Australia in 2000-2002 and became the Chief Executive Officer of United Energy. The Australian operation company was sold by Aquila and closed as of July 24, 2003.

As Vice President of UPS, Mr. Holzwarth was over all three of Aquila's states that had electric operations and had four direct reports:

- --Mike Appril- Wholesale
- -- John Browning-- Dispatch and off-system sales
- -Glenn Keefe-Generation (operations of power plants)
- -Frank DeBacker-Fuel & Purchased Power

Mr. Keith Stamm, currently Aquila's Chief Operating Officer, was head of Aquila's (UtiliCorp) Australia operations but left to head up Aquila Merchant. Mr. Stamm started out at Missouri Public Service Company as an engineer, the predecessor company to Aquila (UtiliCorp). Mr. Stamm left for Australia from MPS in 1997.

As VP-Fuel, Mr. DeBacker was responsible for issuing Request For Proposals (RFPs) for purchased power, and negotiating with the bidders. MPS' need for power starting in 2001 led to the issuing of an RFP in 1998, which was largely caused by the expiration of major long-term capacity power contracts MPS had with Union Electric (UE) and Associated Electric Cooperative (AEC) for 150/180 megawatts, as well as the expiration of a smaller three-year contract with Kansas City Power & Light (KCPL). Load growth also contributed to MPS'need for power in the 2001-2005 timeframe UtiliCorp had problems with UE on this power contract and UE ultimately terminated the agreement. They are not sure why UE was not interested in renewing its contract. With the AEC contract, there were generation and transmission difficulties in receiving the power from that company — consequently Aquila did not want to renew that contract. The AEC agreement provided energy at market price the marginal cost of AEC's system energy plus 10% which was trending towards the regional market price due to the above mentioned difficulties. Both of these capacity agreements ended in 2000/2001 time period.

The KCPL capacity agreement was for summer peaking (3 months or 6 months) contract for 3 years. Had marginal costs increase.

Neither UE, AEC nor KCPL submitted bids in response to the 1998 RFP.

There was a significant power price "spike" in summer of 1998. The price of power was well known when the media reported power costs as high as \$5,000 per megawatt hour. After summer of 1998, every one had "big interest" in building generation. The market price of power for 1999 looking to 2000 was very volatile. MPS did not want to rely on the wholesale spot market for power – they wanted to have a fixed price contract with a specific resource(s). Mr. DeBacker said they "needed resource that you could count on what the price would be." The 1998 RFP called from bids related to specific generating resources, as MPS did not want to rely upon a "system energy" purchase.

In 1998, and for some time before that, Aquila was concerned with the uncertainty of the future direction of the electric industry: the possibility of restructuring, retail access, etc. The possibility of these events occurring were demonstrated by the March 1998 Missouri Commission-sponsored Electric Restructuring Task Force Report. In recognition of this environment, Aquila (UtiliCorp), the Commission Staff and the Office of Public Counsel entered into a Joint Agreement that was approved by the Missouri Commission in an Order dated June 1998. The Joint Agreement provided for modifications to the Commission's Integrated Resource Planning process as it applied to Aquila, and also laid out Aquila's strategy to meet its immediate power needs through an RFP for purchased power, due to the current electric industry environment. MPS did not intend to build and include in rate base generating units to supply its power needs. Thus, Aquila (UtiliCorp) through its regulated MPS division never considered building generating capacity as a "regulated" unit. The five-year period covered by this RFP was chosen because any longer period might have exposed Aquila to the risk of losing customers through retail access; some at Aquila thought five years was too long for a power solicitation. The 5-year period would serve the regulated needs through May 31, 2005.

The philosophy of "buy/not build" in regard to power supply, taken in response to perceived electric industry uncertainty, was an Aquila (UtiliCorp) corporate strategy in place by 1998; it wasn't just Mr. DeBacker's and Mr. Holzwarth's belief at that time. The Aquila (UtiliCorp) philosophy was consistent with MPS' strategy in 1998. MPS took the position to depend on purchased power for short-term power needs, no construction of regulated power plants. The Aquila (UtiliCorp) divisions in Colorado and Kansas followed this same approach. Bob Green, Jim Miller and Harvey Padawer communicated the "buy/not build" strategy for the regulated entities. This strategy is not set down in writing, to DeBacker's and Holzwarth's knowledge, but was no secret within Aquila. Mr. Holzwarth was present at one meeting where Bob Green expressed the "buy/not build" philosophy. Among the senior officers still with Aquila, Rick Green, currently Chairman, President and Chief Executive Officer could address this philosophy if necessary.

Both Mr. DeBacker and Mr. Holzwarth indicated that UtiliCorp was concerned about the future of retail competition / retail access and was concerned about the "stranded costs" relating to loss of customers to competition from "customer choice". The Company wanted to "stay short in the market" (stay in market 3 to 5 years only). The decision to "stay short" in the market was made by UtiliCorp in 1996/1997 time frame. Mr. Holzwarth said, "what would happen if you build big units (generating units) and half your customers went away?" When asked if either of them knew of any system (electric system) where half the customers "went away" neither Mr. DeBacker nor Mr. Holzwarth knew where this had occurred. Mr. Holzwarth cited the competition that was occurring in other states such as Pennsylvania, New Jersey, New York and Illinois.

In 1998, the only economic analysis performed to assess MPS' power options for the first years of the next century were for a three-to-five year period only. Building plants for MPS' rate base was not considered as an option, but Holzwarth's group did consider building a generating plant as an unregulated Exempt Wholesale Generator (EWG) within MPS. Building a unit as part of an EWG was viewed as superior to including a regulated unit in rate base because there was less risk to Aquila of stranded costs if retail access was allowed in Missouri. Plus, the EWG proposal

allowed MPS to better control costs and to "control its own destiny" in regard to power supply. and also allowed MPS the opportunity to profit on a non-regulated basis in the wholesale marketplace through the sale of energy as off-system sales. The analysis performed by UtiliCorp for the EWG never assumed MPS to be a customer of the MPS EWG unit beyond the original five-year power supply proposal in the RFP. Mr. Holzwarth stated that the MPS EWG option was presented at a meeting attended by Bob Green, then UtiliCorp President, and Harvey Padawer (maybe Jim Miller as well). The MPS EWG option was rejected because of questions raised at the meeting the risk of a massive EWG operating failure when taking into consideration MPS' relatively small size; how to obtain generating economies of scale, since a separate organization within MPS would have to be responsible for the EWG unit; MPS' lack of familiarity with the combined-cycle technology; and regulatory scrutiny of possible crosssubsidies between MPS' regulated and non-regulated sides. Mr. Holzwarth said some of the questions posed at this meeting where he recommended that MPS (through UPS) build nonregulated EWG generating unit were: How can MPS operating people manage the EWG also? What would be the "risk" to cash? Where would you get economies of scale from a regulated operation running a non-regulated EWG operations? Mr. Holzwarth stated he did not have answers to these questions.

So, the decision was made to obtain power from other sources. They are not aware of any records documenting the reasons for the MPS EWG option rejection by Aquila senior management. Mr. Holzwarth stated Bob Green made the decision not to build regulated generating units and maybe Mr. Padawer was also involved. Mr Holzwarth stated that the ultimate decision would have been made by Bob Green and/or Harvey Padawer; however, the consensus opinion of senior management was that a regulated power plant with its potential stranded cost issues was not desirable. Mr. Holzwarth indicated he did not make the decision, he only made the presentation recommending that his group UtiliCorp Power Supply build a generating unit as a non-regulated EWG.

If the MPS EWG option had been picked to supply power for MPS' regulated customers, MPS would still have only entered into a 3 to 5 year capacity purchased power contract with the EWG, in accord with the Aquila "buy/not build" corporate philosophy in effect at that time.

Were Bob Green, Harvey Padawer and Jim Miller involved in meetings dealing with Aquila Merchant matters? DeBacker and Holzwarth said Padawer would have been; he was head of Aquila Merchant at the time and reported to Mr. Green. They supposed Bob Green would have met with Aquila Merchant people; Bob Green as President of Aquila (UtiliCorp) was over Aquila Merchant as well as the regulated utility operations. Mr. DeBacker and Mr. Holzwarth were not sure about Mr. Miller, Senior Vice President of UtiliCorp Energy Delivery (UED) which was responsible for the transmission and distributions system (pipes and wires) of the regulated utilities.

Mr. DeBacker and Mr. Holzwarth did not know how purchased price forecasts would affect the generating resource planning process for MPS. They did have access to forecasts of fuel prices for coal, natural gas prices, "market-clearing prices" (purchased power prices), etc, as produced by various models. RDI and Hill & Associates were involved in this forecasting process.

The RFP for MPS power in 1998 was only issued once, but all of the bidders were asked to rebid after the MPS EWG option was rejected. In the initial round of bidding, the MPS EWG was the low-cost option. Aquila Merchant's bid was second lowest, and at that time was based on supplying MPS power from its Batesville, Mississippi unit. All bidders were expected to supply firm transmission service to get the power to MPS. The bid price was expected to include getting the power to MPS service territory. Once the RFP was re-bid, the new bids came in with lower prices. MEPPH was formed in September 1998. Aquila Merchant/MEPPH' new bid was now based on the Aries unit proposal, a two on one combined cycle unit (two combustion turbines on one steam turbine generator with two heat recovery steam generators). Aquila Merchant/MEPPH and NorAm/Houston Industries (now Reliant) were the two finalists from the re-bid process. Houston Industries bid was for three simple cycle combustion turbines. After the re-bids came in, MPS negotiated with both parties to obtain lower prices and more favorable contract conditions. Aguila Merchant/MEPPH ultimately was selected after Houston refused to lower its bid price in order to remain competitive with the most recent meet-Aquila Merchant/MEPPH's bid price. Once Aquila Merchant/MEPPH was selected from the RFP process, a contract was negotiated, it was submitted to the Missouri Commission for approval, and was filed with and accepted by FERC.

The present site of the Aries unit in Pleasant Hill would have been the site of the new unit whether Aquila Merchant/MEPPH or Houston had built it. MPS had already selected that site for the new unit, based upon analysis of a number of injection (interconnection) points into the MPS system. That site adjoined the location of an already existing MPS substation. The land was previously owned by MPS many years ago but had been sold to a couple for farmland. MPS inquired through their search for land to build the EWG option that the couple would sell the land. MPS told Aquila Merchant, the bidders of capacity to MPS, that they thought the owners of the land would sell the property because of a divorce situation. MPS would not get the land from the owners, Aquila Merchant had do all the negotiations on their own. With this land adjacent to MPS' substation, there were no interconnection problems in transporting large amount of electricity to MPS system.

Burns & McDonnell were hired to analyze the first set of RFP responses in 1998. MPS did its own in-house analysis for the "re-bids," but Burns & McDonnell also reviewed MPS' work in that regard. In reference to materials Mr. DeBacker has on the 1998 RFP process, he has the materials included in the response to Staff Data Request No. 302 in this case, the 1998 Missouri Commission Order accepting the Joint Recommendation, and the FERC orders on Aries matters. Holzwarth has nothing. There is a policy at Aquila to "wipe out" your data from the system three months after you walk out the door. The underlying support for the analysis and the actual models can not be located by either of them. They contacted Aquila's current Information Systems group to retrieve electronic files and were told they no longer existed. Mr. DeBacker attempted to locate his files but he believes they no longer exist.

Regarding the Greenwood unit, Holzwarth's group was involved with the negotiations with the former owner as the lease was expiring. Neither Holzwarth nor DeBacker was involved in the decision to create a separate subsidiary for the Greenwood unit after Aquila became the owner, Glenn Keefe would be the person to ask about that.

Highly Confidential

Merchant Energy Partners –

Missouri Combined Cycle

Development Project

Dated January 5, 1999

Merchant Energy Partners

Missouri Combined Cycle Development Project

January 5, 1999

Meeting Purpose

- Inform and update UCU on proposed EWG transaction parameters;
- Seek approval of proposed capital budget for development of 500 MW CCGT;
- Proceed with operating, legal and finance activities related to formation of project team and project development;
- communication elements and timeline for project execution. Determine Executive Review Team and establish key

AQUILA ENERGY

Outline

Project Summary

Description and Economics

Project Risks and Assessment

A. Market Assessment

B. Contract Structure

Development Risks and Requirements

Regulatory/Legal

Finance Risks

Project Economics

A. Commodity Assumptions

B. Unit Assumptions

C. Financial Sensitivities

≥

Timeline

. Project Summary

Project Description

Size:

500 MW

Ownership:

MEP; equity sale at time of project financing

Technology:

Combined cycle "F" class gas turbines plant

Location:

Pleasant Hill, Missouri

\$224 million (excluding reserve funding)

Heat Rate:

Estimated Cost:

7,000 Btu/kWh

Build Method:

EPC contract, completed December 2002

Operational:

June 2001 (Simple Cycle):

320 MW 500 MW

January 2002 (Combined Cycle):

Transmission:

Direct interconnection to MPS (Northern SPP)
Option to tie into 345 kV KCPL line to be investigated

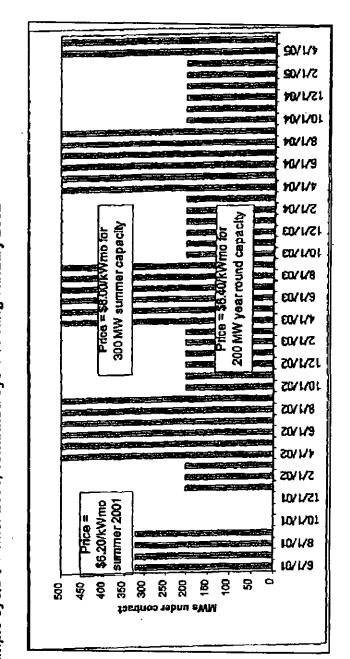
Panhandle Eastern, Williams or KN Gas Transportation:

AQUILA ENERGY

Contract Description

Contract between EWG and Missouri Public Service:

- Project Company (EWG) sells capacity and energy to MPS under tolling agreement
- Sales unit contingent, guaranteed at 94% availability
- MPS responsible to purchase its own firm gas transportation
- Simple cycle summer 2001, combined cycle starting January 2002



Project Economics

Major Capital Assumptions

- 100% debt financing during construction, 80% at start of full operations
- MEP owns 50% of project company
- All-in cost to build, approximately \$450/kW (excluding pre-funding reserves) MEP capital invested at end of construction totals approximately \$24 million ($S^0 \stackrel{i}{\sim} \sqrt{2} \ell \stackrel{i}{\sim} \sqrt$
- Project Company is 100% merchant after expiration of MPS and MEP contract (years 16+)
- All revenue and expenditures capitalized through construction ending December 2001
 - Thus, no incremental income or EPS Impact until 2002

Major Operating Assumptions

- Forced outage rate of 3% per year
- Scheduled maintenance 20 days per year (in April or October)
- Heat rate 7,000 Btu/kWhr
- Turbine maintenance NPV (15% discount) = \$38 million
- Firm gas transportation NPV (15% discount) = \$32 million
- 22 full time equivalent employees at site

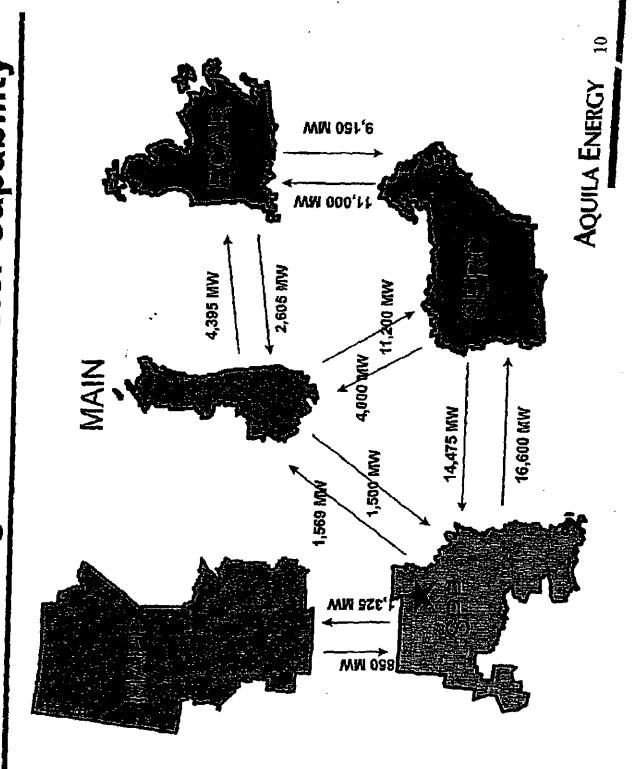
Results

- 15% after-tax IRR to UCU over 30 years based on MEP contribution
- Incremental EPS ranges from less than \$0.005 loss per share to \$0.02 gain per share over the first three years, increasing to a gain above \$0.02 per share for all years thereafter

AQUILA ENERGY

II. Project Risk Assessment

A. Market Assessment



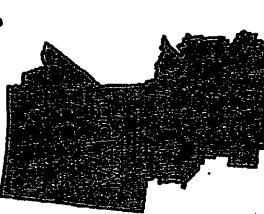
AQUILA ENERGY

Energy Markets - Liquid Trading Hubs

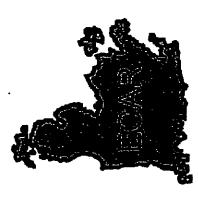
HC Schedule 3-12

1997 Regional Supply & Demand

Peak Demand 34,891 MW Rsv. Margin 11.8% Supply 39,552 MW



Peak Demand 45,887 MW **Rsv. Margin 11.7%** Supply 51,961 MW



Supply 104,212 MW Peak Demand 93,492 MW Rsv. Margin 10.3%



Supply 152,402 MW Peak Demand 137,382 MW Rsv. Margin 9.9%

AQUILA ENERGY

Supply 41,845 MW PPeak Demand 36,479 MW RRSV. Margin 12.8%

2005: New Capacity Requirements

New capacity required by NERC Region by 2005 to Maintain Reserve Margin

15% Reserve Margin: 8,949 MWs 10% Reserve Margin: 6,704 MWs



10% Reserve Margin: 14,364 MWs 15% Reserve Margin: 21,339 MWs



15% Reserve Margin: 10,420 MWs 10% Reserve Margin: 6,955 MWs



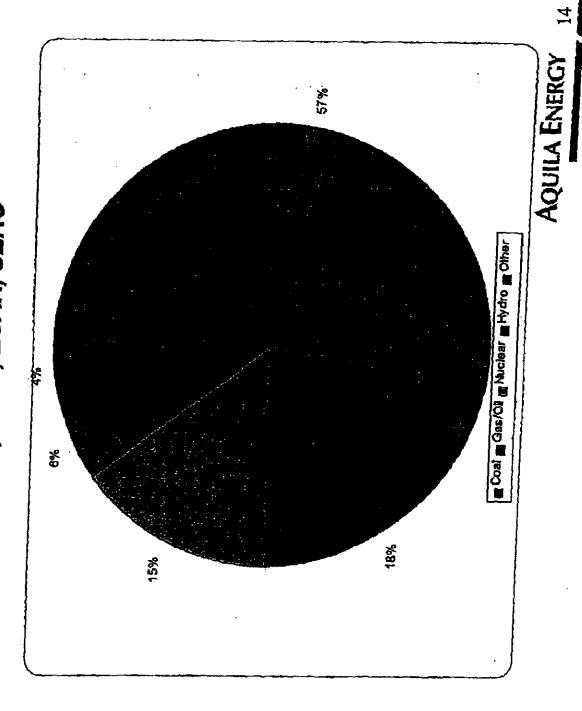
10% Reserve Margin: 30,287 MWs 15% Reserve Margin: 41,033 MWs

AQUILA ENERGY

10% Reserve Margin: 6,966 MWs 15% Reserve Margin: 9,837 MWs

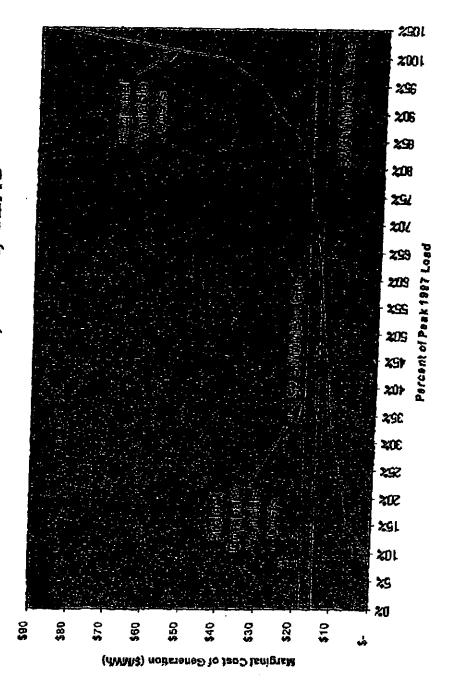
Capacity by Fuel

Collective for SPP, MAPP, MAIN, ECAR, SERC



Unit Ranking in Supply Curve





Contract Structure of Project Company

Ω.

HC Schedule 3-17