

Exhibit No.:
Issue: Affordability, Energy Efficiency, and
Demand Response Programs; Aquila
Advisory Group
Witness: Allen D. Dennis
Type of Exhibit: Direct Testimony
Sponsoring Party: Aquila, Inc. dba KCP&L Greater
Missouri Operations Company
Case No.: ER-2009-____
Date Testimony Prepared: September 5, 2008

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2009-____

DIRECT TESTIMONY

OF

ALLEN D. DENNIS

ON BEHALF OF

**AQUILA, INC. dba
KCP&L GREATER MISSOURI OPERATIONS COMPANY**

**Kansas City, Missouri
September 2008**

DIRECT TESTIMONY

OF

ALLEN D. DENNIS

Case No. ER-2009-_____

1 **Q: Please state your name and business address.**

2 A: My name is Allen D. Dennis. My business address is 1201 Walnut, Kansas City,
3 Missouri 64106-2124.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company (“KCP&L”) as Director,
6 Products and Services.

7 **Q: What are your responsibilities?**

8 A: My responsibilities include providing leadership and direction to the Energy Efficiency,
9 Demand Response, Market Competitiveness, and Market Intelligence Teams of KCP&L
10 and Aquila, Inc. dba KCP&L Greater Missouri Operations Company (“GMO” or the
11 “Company”). My duties include initiating and bringing to market new products, as well
12 as improvements and innovations to existing affordability, energy efficiency, and demand
13 response programs products and services for KCP&L and GMO.

14 **Q: Please describe your education, experience and employment history.**

15 A: I graduated from Colorado State University with a Bachelor of Science degree in
16 Mechanical Engineering in 1981. I have 25 years of experience in the electric and natural
17 gas industry. I was first employed at KCP&L in 2004 as the Manager, Market
18 Management. In this capacity, I managed KCP&L’s Energy Consultants, Commercial
19 and Residential Sales functions. Prior to my employment at KCP&L, I served as a

1 Director in the Enterprise Consulting Division for Black & Veatch responsible for the
2 energy practice and consulting with clients on integrated resource plans, risk management
3 and operational improvements. Additionally, I was Executive Vice President and co-
4 founder of Enserco Energy, an energy trading, marketing, and services company and co-
5 founder and board member of Hometown Connections, a company focused on offering
6 products and services to public power utilities. Prior to Enserco Energy I served as
7 Director, Power Marketing for KN Energy where I formed the electric trading and
8 marketing area. I began my utility career at Public Service Company of Colorado and
9 over the course of 14 years held various positions including marketing engineer,
10 marketing project specialist, manager of electric wholesale and cogeneration markets, and
11 manager of bulk power business development.

12 **Q: Have you previously testified in a proceeding at the Missouri Public Service**
13 **Commission (“MPSC”) or before any other utility regulatory agency?**

14 A: No, I have not.

15 **Q: What is the purpose of your testimony?**

16 A: The purpose of my testimony is to provide a progress report on the development and
17 implementation of the Affordability and Energy Efficiency programs. For these
18 programs, I will provide an update explaining what steps GMO has taken thus far with
19 respect to these initiatives.

20 **Q: What did the Stipulation and Agreement in GMO’s last rate case, Case No. ER-**
21 **2007-0004, provide concerning Demand-Side Management programs?**

22 A: Paragraph 11 of the Stipulation and Agreement provided that GMO would defer the costs
23 of Demand-Side Management (“DSM”) programs in Account 186 and calculate

1 allowance for funds used during construction (“AFUDC”) annually. It also stipulated
2 that these costs would be amortized over 10 years and that the prudently-incurred costs
3 included in Account 186 would be added to rate base in GMO’s next rate case.

4 **Q. Did the Stipulation and Agreement set out a funding goal for these programs?**

5 A. Yes. The Stipulation and Agreement set out a funding goal for these programs of one
6 percent of GMO’s annual revenue by 2010.

7 **Q: What programs has GMO implemented since its last rate case?**

8 A: GMO has implemented two Affordability programs and five Energy Efficiency
9 programs. Specifically, the programs are as follows:

10 Affordability

- 11 • Low-Income Affordable New Homes (New Construction); and
- 12 • Low-Income Weatherization.

13 Energy Efficiency

14 Residential:

- 15 • Home Performance with ENERGY STAR®;
- 16 • Residential Lighting Program; and
- 17 • ENERGY STAR® New Homes.

18 Commercial/Industrial (“C&I”):

- 19 • Energy Audit and Energy Saving Measures Program (“C&I Program”);
- 20 and
- 21 • Building Operator Certification Program.

22 **Q: Could you please describe the programs and provide an update as to the status of**
23 **their implementation?**

1 A: Yes, the following is a program-by-program description, including the status of each
2 program.

3 Affordable New Homes (New Construction):

4 The Affordable New Homes Program is designed to be a partnership between GMO and
5 organizations to achieve qualifying energy efficient affordable new housing for the low-
6 income community. Financial incentives will be available up to \$800 for the incremental
7 cost for high efficiency cooling systems, either central air conditioners or heat pumps.
8 An incentive of up to \$200 will be available toward the purchase of an ENERGY STAR[®]
9 rated refrigerator, up to \$100 for the purchase of ENERGY STAR[®] rated lighting fixtures
10 and up to \$400 for additional attic, floor or crawlspace insulation. The tariff for this
11 program became effective March 12, 2008.

12 Low-Income Weatherization:

13 Qualified lower income customers can get help managing their energy use and bills
14 through GMO's Low-Income Weatherization Program. The program works directly with
15 local social agencies that already provide weatherization services to low-income
16 customers. GMO will provide supplemental funds to the social agencies to cover the cost
17 of additional cost-effective weatherization measures. GMO residential customers with
18 income up to 185% of the federal poverty guidelines may participate. The tariff for this
19 program became effective March 12, 2008.

20 Home Performance with ENERGY STAR[®]:

21 Home Performance with ENERGY STAR[®] ("HPwES") enhances the traditional home
22 energy audit service and uses the ENERGY STAR[®] brand to help encourage and
23 facilitate whole-house energy improvements. Missouri Department of Natural Resources

1 (“MDNR”) is sponsoring a statewide HPwES program. GMO will coordinate with
2 MDNR and the Metropolitan Energy Center (“MEC”) to implement an effective HPwES
3 program regionally. GMO will focus specifically on the marketing, customer incentives,
4 and program evaluation portion of the partnership. The tariff for this program became
5 effective April 30, 2008.

6 Residential Lighting Program:

7 This program provides rebates for compact fluorescent light bulbs (“CFLs”) at point of
8 purchase in specific stores and is administered by the Midwest Energy Efficiency
9 Alliance.

10 The 2007 Residential Lighting program accomplished 145 percent of the annual
11 goal, resulting in over 692 annual megawatt hours saved annually and over 4,848 lifetime
12 megawatt hours saved.

13 ENERGY STAR® New Homes:

14 ENERGY STAR® New Homes requires that new homes be constructed under guidelines
15 set by the U.S. Environmental Protection Agency through the ENERGY STAR®
16 program. Homes built under these guidelines are typically 20 percent to 30 percent more
17 energy efficient than standard homes. These savings are based on heating, cooling, and
18 hot water energy use and are typically achieved through a combination of building
19 envelope upgrades, high performance windows, controlled air infiltration, upgraded
20 heating and air conditioning systems, tight duct systems, and upgraded water-heating
21 equipment. Homes can be qualified as an ENERGY STAR® home through two different
22 paths. The prescriptive path uses Building Option Packages which represent a set of

1 construction specifications for a specific climate zone. The performance path qualifies the
2 home based on a home energy rating.

3 Builders who construct homes that meet the ENERGY STAR[®] standard will qualify for
4 an \$800 rebate. GMO will also pay up to \$750 for the inspection and ratings required to
5 meet the ENERGY STAR[®] requirements. The tariff for this program became effective
6 March 12, 2008.

7 Energy Audit and Energy Savings Measures Program (“C&I Program”):

8 The C&I Program is made up of multiple parts. For the C&I Audit Rebate, GMO offers
9 rebates to customers to cover 50% of the cost of an energy audit, up to \$300 for
10 customers with facilities less than 25,000 square feet and up to \$500 for customers with
11 facilities over 25,000 square feet. In order to receive the rebate, the customer must
12 implement at least one of the audit recommendations that qualify for a GMO C&I
13 Custom Rebate.

14 For the C&I Custom Rebate programs, Retrofit and New Construction, GMO
15 offers rebates to customers that install, replace or retrofit qualifying electric savings
16 measures, including HVAC systems, motors, lighting, pumps, etc. Custom rebates are
17 calculated as the lesser of a buy-down to a two-year payback or 50% of the incremental
18 cost. The tariff for this program became effective April 30, 2008.

19 Building Operator Certification Program:

20 Building Operator Certification (“BOC”) Program is a market transformation effort to
21 train facility operators in efficient building operations and management (“O&M”),
22 establish recognition of and value for certified operators, support the adoption of
23 resource-efficient O&M as the standard in building operations, and create a self-

1 sustaining entity for administering and marketing the training. The tariff for this program
2 became effective March 12, 2008.

3 **Q: What are the current expected costs of the programs?**

4 A: The following table shows the budgeted funding levels by program.

	2008	2009	2010	2011	2012	Total
Affordable New Homes	\$32,000	\$64,000	\$71,500	\$64,000	\$64,000	\$295,500
Low-Income Weatherization	\$467,100	\$468,198	\$469,329	\$470,494	\$471,694	\$2,346,815
HPwES	\$137,500	\$137,500	\$157,500	\$137,500	\$137,500	\$707,500
Residential Lighting	\$80,400	\$116,600	\$125,600	\$137,000		\$459,600
ENERGYSTAR® New Homes	\$80,000	\$545,000	\$985,000	\$935,000	\$935,000	\$3,480,000
C&I Program	\$807,301	\$867,301	\$867,301	\$867,301	\$867,301	\$4,276,505
BOC Program	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$525,000
Total	\$1,709,301	\$2,303,599	\$2,781,230	\$2,716,295	\$2,580,495	

5

6 **Q: Does GMO anticipate implementing additional DSM programs?**

7 A: Yes. Prior to the acquisition of Aquila, Inc. (“Aquila”) by Great Plains Energy
8 Incorporated, Aquila personnel had been coordinating the plans to implement DSM
9 programs with KCP&L personnel. This led to the development and implementation of
10 programs for Aquila that were substantially similar to those of KCP&L. However,
11 Aquila was unable to develop and implement all of the programs that KCP&L has in
12 place due to time and resource considerations. Now that the transaction has been
13 completed, GMO is working to develop and implement additional programs in order to
14 offer GMO customers the same programs as are offered to KCP&L customers.

15 **Q: What are the additional programs that GMO plans to implement?**

16 A. GMO has filed tariffs for the Energy Optimizer Program, MPower, the Cool Homes
17 Program, and the Home Energy Analyzer. The tariffs were filed on August 11, 2008 with
18 a requested effective date of September 10, 2008.

1 **Q. Please describe these programs.**

2 A. Energy Optimizer Program (Air Conditioning Cycling):

3 The Energy Optimizer program is an air conditioning cycling program by which GMO
4 could reduce residential and small commercial air conditioning load during peak summer
5 days. This load reduction would be achieved by sending a paging signal to a control
6 device in a thermostat attached to the customer's air conditioner. The control device then
7 turns the air conditioner off and on or ramps up the temperature over a period of time
8 depending on the load reduction strategy established by GMO.

9 MPower:

10 MPower is a C&I curtailment program whereby customers with the ability to curtail
11 25 kW or more would be incented to contract with GMO to curtail their load when
12 requested by GMO. Under MPower, the customer would be invited to use the
13 curtailment method(s) that best meets their capabilities and needs. This could include
14 turning on a back-up generator, shutting off lights or production lines, raising their
15 cooling system temperature several degrees, or stopping operations and sending their
16 employees home.

17 Cool Homes Program:

18 This program is designed to incent customers to install high efficiency cooling
19 equipment, before failure, to maximize energy savings benefit. Early replacement will be
20 target replacement of Seasonal Energy Efficiency Ratio ("SEER") 6 to 8 equipment with
21 SEER 14 or higher equipment.

22 Home Energy Analyzer:

1 This Program allows all residential customers with access to the Internet to
2 retrieve their billing information, make comparisons of electric usage on a monthly or
3 yearly basis, analyze electric usage on an end use basis, and research energy savings by
4 end use through a searchable resource center.

5 **Q: Is GMO requesting any additional programs?**

6 A: Yes, GMO is requesting two additional programs, an Economic Relief Pilot Program
7 (“ERP²”) and a Supplemental Weatherization and Minor Home Repair program.

8 **Q: Describe each of these new programs?**

9 A: The ERP² is a program designed to deliver energy affordability benefits to qualifying
10 low-income residential GMO customers. This Program delivers a \$50 per month “fixed
11 credit” to low-income customers in an effort to improve low-income home energy
12 affordability. ERP² will be operated by GMO in order to generate affordable home
13 electric bills to ERP² participants, thus allowing those participants to make full and
14 timely payments on their monthly bills. Based on 1,000 participants, the annual proposed
15 budget is \$630,000. The ERP² proposed tariff is included in the Minimum Filing
16 Requirements of this filing. Company witness Chris Giles includes in his Direct
17 Testimony a request that 50% of the cost of the program be deferred until GMO’s next
18 rate case and considered for recovery at that time.

19 The proposed Supplemental Weatherization and Minor Home Repair Program is
20 intended to assist qualified residential customers in reducing their energy usage by
21 weatherizing their home. Efficiency efforts include insulation enhancements, infiltration
22 reduction, heating and cooling service, lighting upgrades, installation of setback
23 thermostats and energy efficiency education. Home repair efforts include hazards,

1 including installation of smoke alarms and CO₂ detectors. Replacement of basic systems,
2 including heating, electrical, plumbing, and roofing when considered an immediate health
3 / safety risk or emergency repair.

4 The program will be administered by GMO and implemented by qualified
5 weatherization and home repair contractors. Based on 75 weatherization participants and
6 75 minor home repair participants, the annual proposed budget is \$892,500. GMO has
7 not proposed cost recovery in this rate case, but rather will collaborate with the Staff and
8 the Office of Public Council on cost recovery and other aspects of the program.

9 **Q: Does GMO utilize an advisory group when developing its DSM programs?**

10 A: Yes. What has been known as the Aquila Advisory Group has been in existence for some
11 time. This group meets approximately every 6 - 8 weeks. During these meetings, GMO
12 representatives discuss the company's plans for new programs as well as existing
13 programs. GMO takes feedback from this group and uses it to modify programs prior to
14 filing them with the MPSC. The group has been involved in the development of each of
15 GMO's current programs and includes representatives from the MPSC Staff, the Office
16 of Public Counsel, the MDNR, the Missouri Valley Community Action Agency, the City
17 of Kansas City, and the Sedalia Industrial End-Users Group.

18 **Q: Does GMO intend to continue with this advisory group?**

19 A: For the time being we do. However, there is significant overlap between the KCP&L
20 Customer Program Advisory Group and the Aquila Advisory Group. Given the
21 previously stated plan to develop and implement GMO programs that are consistent with
22 the KCP&L programs, it may make sense to combine these groups in the future.

23 **Q: Does that conclude your testimony?**

1 A: Yes, it does.

