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Issue: Generation Operations Witness: F. Dana Crawford

Type of Exhibit: Direct Testimony

Sponsoring Party: Great Plains Energy Incorporated and

Kansas City Power & Light Company

Case No.: EM-2007-

Date Testimony Prepared: April 2, 2007

#### MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: EM-2007-\_\_\_

**DIRECT TESTIMONY** 

**OF** 

F. DANA CRAWFORD

ON BEHALF OF

**GREAT PLAINS ENERGY INCORPORATED** 

**AND** 

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri April 2007

Exhibit No.

Date 4-02-08 Rptr KF

## DIRECT TESTIMONY

## OF

## F. DANA CRAWFORD

## Case No. EM-2007-\_\_\_\_

1	Q:	Please state your name and business address.		
2	A:	My name is F. Dana Crawford. My business address is 1201 Walnut, Kansas City,		
3		Missouri 64106.		
4	Q:	By whom and in what capacity are you employed?		
5	A:	I am employed by Kansas City Power & Light Company ("KCPL") as Vice President,		
6		Plant Operations.		
7	Q:	What are your responsibilities?		
8	A:	My responsibilities include the direction of the operation and maintenance of KCPL's		
9		fossil-fuel generating stations, including their support and construction services.		
10	Q:	Please describe your education, experience and employment history.		
11	A:	I graduated from the University of Missouri-Columbia with a degree in Civil		
12		Engineering. I also have a Master of Business Administration degree from DePaul		
13		University. I joined KCPL in 1977 as a Construction Engineer on the Wolf Creek		
14		Nuclear Plant project. In 1980, I was promoted to Manager, Nuclear and promoted to		
15		Director, Nuclear Power in 1983. Following completion of Wolf Creek, I became		
16		Manager, Distribution Construction & Maintenance, in 1988 and Manager, Customer		
17		Services, in 1989. In 1994, I became Plant Manager of the La Cygne Generating Station		
18		I was promoted to my current position in March of 2005.		

1	Q:	Have you previously testified in a proceeding at the Missouri Public Service		
2		Commission ("MPSC") or before any other utility regulatory agency?		
3	A:	Yes, I testified before the MPSC in KCPL's rate case concerning the Wolf Creek Nuclear		
4		Generating Station. I also submitted testimony in KCPL's 2006 rate cases before the		
5		MPSC and the Kansas Corporation Commission ("KCC") and I have submitted pre-filed		
6		testimony in the 2007 rate cases before the MPSC and KCC.		
7	Q:	What is the purpose of your testimony?		
8	A:	The purpose of my testimony is to describe the integration process between the supply		
9		departments of KCPL and Aquila, Inc. ("Aquila") and how Great Plains Energy		
10		Incorporated ("Great Plains Energy") plans to maintain top-tier performance of the		
11		KCPL/Aquila generation fleet. I will also address the issue of jointly dispatching the		
12	•	generation fleets and Great Plains Energy's long-term plan for it operations.		
13	Q:	Please describe Great Plains Energy's plan to integrate Aquila's generation fleet.		
14	A:	Great Plains Energy is in the process of establishing a Plant Operations Integration Team.		
15		The team will be made up of employees in leadership positions from both the KCPL and		
16		Aquila Supply divisions. The Plant Operations Integration team will have two		
17		(2) primary functional teams; an Operations team and a Maintenance team. The		
18		Operations and Maintenance teams will be supported by several sub-teams that will		
19		include Training and Safety, Workforce, Supply Chain, Benchmarking, Environmental		
20		and Information Technology. The Teams will address key issues in the area of Capital		
21		requirements, Systems and Processes, Workforce Alignment and Organization, and		
22		Operations/ Maintenance philosophy. Team goals and objectives include the following:		
23		Conduct asset life assessment:		

1		<ul> <li>Define and deliver key best practice operation and maintenance strategies to</li> </ul>		
2		achieve top-tier performance;		
3		Develop an appropriate post-merger organizational structure;		
4	Identify optimum ongoing staffing requirements and necessary employee skill			
5	levels; and			
6	Integrate key data streams.			
7	Q:	Q: Please describe how Great Plains Energy plans to maintain top-tier performance of		
8		the KCPL and Aquila generation fleets?		
9	A:	KCPL had previously identified two primary objectives to maintain the success of its		
10		generation assets. The first objective identified was effectively managing the work force.		
11		Great Plains Energy has introduced a corporate-wide "winning culture" initiative to		
12	improve employee engagement and accountability in the business. This has involved			
13	efforts such as leadership development and additional training programs in safety,			
14	maintenance and operations. We have also increased emphasis on communication			
15	throughout the organization and encouraged learning and growth opportunities at all			
16	levels.			
17	The second objective KCPL identified was performance improvement projects of			
18		its generation assets. Under this second objective, projects were identified in four key		
19		areas: process improvement, outage planning and work execution, the use of technology,		
20		and asset component upgrades or retrofits. One example of a process improvement		
21		project would be the Electric Power Research Institute ("EPRI") Plant Reliability		
22		Optimization ("PRO") process. The purpose of the PRO process is to facilitate moving		

plant maintenance work from a reactive mode to a proactive (or planned) maintenance

strategy. The PRO process also provides a means to communicate and share best practices on a consistent basis between plants. For example, by using the PRO maintenance basis and root-cause analysis, equipment breakdown information at one location can easily be discussed with the other plant sites. A key strategy in this process improvement effort is the increased utilization of industry collaboration opportunities to share experiences and operating practices with other utilities.

The second major area of asset performance improvements relates to outage planning and work execution. The goal is to minimize the outage durations while still accomplishing all the work necessary to operate the unit until the next scheduled outage. KCPL continues to focus on developing more comprehensive integrated outage schedules that it can analyze to determine the shortest schedule well in advance of the outage. Another major component of maintenance planning is the development of standardized work packages. Having pre-planned work packages greatly improves crew productivity by having all the information and material necessary to do the maintenance task ready when the work is assigned.

The use of technology is the third significant area of asset performance improvement initiatives. KCPL has installed a new technology application called "Smart Signal" on each KCPL generating unit. "Smart Signal" is a proprietary process that takes real-time plant operating data and feeds it into a model that compares it to "normal" conditions. Any deviation can be an indication of an equipment problem needing attention. "Smart Signal" is also a "backup" tool that can assist new or inexperienced employees during trouble-shooting activities. Each KCPL unit has a plant-specific operations simulator for operator training. Evaluations are underway to expand the use of

these simulators to accomplish increased operator training during off-shifts. The simulators are also proving valuable in allowing "trial" runs of proposed changes in operating procedures or practices.

Q:

A:

Q:

A:

The fourth major area of plant asset improvements involves upgrades or retrofit projects to the existing stations. These projects may be necessary for a number of reasons such as aging plant components reaching the end of their useful life and projects to increase the efficiency of the plant. These change-outs could be for safety reasons or to maintain the existing output and reliability of the plants. This is a very beneficial opportunity from both an economic and an environmental viewpoint.

Through the KCPL/Aquila integration team process we will take a collaborative look at these performance improvement projects and evaluate the potential implementation strategies for the current Aquila generation fleet. We will also evaluate additional performance improvement projects that are identified through the integration process and look for opportunities to implement them where appropriate throughout the KCPL/Aquila generation fleet.

Will KCPL and Aquila jointly dispatch their generating units following the merger? We currently do not anticipate jointly dispatching the KCPL and Aquila generating resources, although we will continue to evaluate the potential benefits and feasibility of joint dispatch. If at some point we conclude that joint dispatch makes sense, we will take the necessary steps to implement it.

#### What factors might influence your decision?

Whether joint dispatch ultimately makes sense will depend on a variety of factors, such as whether Aquila can join the Southwest Power Pool ("SPP") on terms that are favorable

1		to the company and its customers, the extent to which the evolving SPP-administered	
2		markets allow SPP participants to capture joint dispatch benefits through market-driven	
3		mechanisms, and the technical issues associated with combining control area operations.	
4	Q:	Do the estimates of synergy savings included in the testimony of Robert Zabors	
5		include savings related to joint dispatch?	
6	A:	No, they do not.	
7	Q:	Will the merger impact the generating units that are jointly owned by KCPL and	
8		Aquila?	
9	A:	No, KCPL and Aquila are partners in the Iatan Unit 1 and Iatan Unit 2 generating units.	
10		Iatan Unit 1 has been in service since 1980. Iatan Unit 2 is presently under construction.	
11		The merger will have no adverse impact on the operations of those generating units.	
12		KCPL will continue to own 70% of Iatan Unit 1 and be entitled to a commensurate	
13		amount of power from that unit. Aquila, as it will be renamed by Great Plains Energy	
14		following the merger, will continue to own 18% of the unit and be entitled to a	
15		commensurate amount of power. Similarly, KCPL will continue to own approximately	
16		54.7% of latan Unit 2 and be responsible for a commensurate portion of construction	
17		costs until the unit is complete and Aquila will continue to own 18% of the unit and be	
18		responsible for a commensurate portion of construction costs.	
19	Q:	Does that conclude your testimony?	
20	۸.	Van it door	

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Joint Appli Energy Incorporated, Kansas C Company, and Aquila, Inc. for of Aquila, Inc. with a Subsidiar Incorporated and for Other Re	City Power & Light Approval of the Merger y of Great Plains Energy	) ) Case No. EM-2007 )			
A	FFIDAVIT OF F. DANA C	CRAWFORD			
STATE OF MISSOURI	) ) ss				
COUNTY OF JACKSON	)				
F. Dana Crawford, being	g first duly sworn on his oath	ı, states:			
1. My name is F. D	Dana Crawford. I work in Ka	ansas City, Missouri, and I am employed by			
Kansas City Power & Light Company as Vice President, Plant Operations.					
2. Attached hereto	and made a part hereof for a	all purposes is my Direct Testimony on behalf			
of Great Plains Energy Incorpora	ated and Kansas City Power	& Light Company consisting of			
Six (6) pages, hav	ing been prepared in written	form for introduction into evidence in the			
above-captioned docket.					
3. I have knowledg	ge of the matters set forth the	erein. I hereby swear and affirm that my			
answers contained in the attache	ed testimony to the questions	s therein propounded, including any			
attachments thereto, are true and	d accurate to the best of my k	knowledge, information and belief.			
Subscribed and sworn before me	<del></del> ·	blic Deux			
My commission expires: \( \overline{\mathbb{F}}_{\overline{\emptyre}} \)	16. 4 2011	"NOTARY SEAL" Nicole A. Wehry, Notary Public Jackson County, State of Missouri My Commission Expires 2/4/2011 Commission Number 07391200			