

<b>Exhibit No.:</b>	
<b>Issues:</b>	<i>Plant Operations and Public Interest</i>
<b>Witness:</b>	Herman Schopman
<b>Sponsoring Party:</b>	Trigen-Kansas City Energy Corporation
<b>Type of Exhibit:</b>	Direct Testimony
<b>Case No.:</b>	HM-2004-0618
<b>Date Testimony Prepared:</b>	September 1, 2004

**MISSOURI PUBLIC SERVICE COMMISSION  
UTILITY OPERATIONS DIVISION**

**DIRECT TESTIMONY  
OF  
HERMAN SCHOPMAN**

**TRIGEN-KANSAS CITY ENERGY CORP. and  
THERMAL NORTH AMERICA, INC.**

**CASE NO. HM-2004-0618**

**September 2004**

Joint Application of )  
 )  
**Trigen-Kansas City Energy Corp.** )  
 )  
and ) Case No. HM-2004-0618  
 )  
**Thermal North America, Inc.** )  
 )  
For Grant of the Authority Necessary )  
for the Transfer of Control and Sale of )  
All Stock Currently Owned by )  
Trigen Energy Corporation, Inc. to )  
Thermal North America, Inc. )

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

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Notary Public

1                                   **DIRECT TESTIMONY OF**

2                                   **HERMAN SCHOPMAN**

3                                   **TRIGEN-KANSAS CITY ENERGY CORP.**

4                                   **CASE NO. HM-2004-0618**

5  
6       **Q.     What is your name and address?**

7       A.     My name is Herman Schopman and my business address is 1990 Post Oak Boulevard,  
8       Suite 1900, Houston, Texas 77056-4499.

9       **Q.     By whom are you employed and in what capacity?**

10      A.     I am Vice President of both Trigen Energy Corporation and Trigen-Kansas City  
11      Energy Corporation, and I am authorized to testify today on behalf of both of those  
12      companies. I will refer to those corporations as Trigen Energy and Trigen KC respectively.  
13      In addition, I am Senior Vice President Steam Plant Operations of Tractebel Power, Inc.

14      **Q.     What is the purpose of the testimony you are giving today?**

15      A.     The purpose of my testimony is to address the history of Trigen KC, describing its  
16      past and current operations, addressing why Thermal North America, Inc.'s planned mode of  
17      operation is compatible with Trigen KC's business and why the proposed acquisition is in the  
18      public interest.

19      **Q.     Please describe your educational background and professional experience.**

20      A.     I received a Bachelor of Science degree in Mechanical Engineering from  
21      Pennsylvania State University in 1982. I am a registered Professional Engineer in the  
22      Commonwealth of Pennsylvania. I began my career in 1982 working for General Physics  
23      Corporation of Columbia, Maryland. I spent five years with General Physics working as a

1 consulting engineer assigned to Limerick Generating Station, a twenty-two hundred  
2 megawatt nuclear power station owned and operated by PECO Energy. In 1987 I joined the  
3 company that at that time was known as Philadelphia Thermal Energy Corporation, as a  
4 Project Engineer. In 1989 I became its Manager of Plant Engineering and Maintenance, in  
5 1997 its Vice President Operations and in 2000 I was designated as its President. As a result  
6 of organizational changes within Trigen Energy, I was named Vice President of Trigen KC in  
7 2002. I will describe those changes later in my testimony. In 2002 I also was named Senior  
8 Vice President Steam Plant Operations of Tractebel Power, Inc.

9 **Q. What is the nature of Trigen KC's business?**

10 A. Trigen KC is the district steam system that operates in the downtown business district  
11 of Kansas City, Missouri. I will refer to that system in my testimony as the "Steam System."  
12 Trigen KC distributes high- and low-pressure steam through a network of six and one-half  
13 miles of pipeline buried beneath the streets of downtown Kansas City and sells that steam to  
14 approximately sixty-five customers. Trigen KC is a public utility subject to the jurisdiction  
15 of the Commission. Our customers use steam to heat and humidify buildings, prepare food,  
16 and heat water, among other things. Our customers include office buildings, apartment  
17 buildings, government facilities and commercial businesses.

18 **Q. Please briefly describe the ownership history of the Steam System.**

19 A. The Steam System was acquired by Trigen Energy Corporation from Kansas City  
20 Power and Light ("KCPL") in 1990. At the time, Trigen Energy already owned or was in the  
21 process of acquiring or constructing district steam and other energy systems in Nassau, Long  
22 Island, New York; Oklahoma City, Oklahoma; Trenton, New Jersey; Tulsa, Oklahoma; and  
23 in Canada in London, Ontario and Prince Edward Island. At that time Trigen Energy was

1 owned by Cofreth American Corporation and ELYO, two French companies that were  
2 ultimately owned and controlled by entities now known Suez S.A., an international energy,  
3 water, waste and communications company headquartered in Paris, France, and its  
4 subsidiary, Suez-Tractebel S.A., which together with its subsidiaries and affiliates I will refer  
5 to as “Tractebel.”

6 **Q. What organizational changes occurred after 1990?**

7 A. In 1994, Trigen Energy conducted an initial public offering and its stock became  
8 publicly traded on the New York Stock Exchange. A majority interest still was held by  
9 ELYO. Then, in April 2000 ELYO and Suez acquired the other publicly held shares. Since  
10 that time Trigen Energy has been administered within the Suez organization through its  
11 global energy arm, The Tractebel Group.

12 **Q. Where does Trigen KC fit within the Trigen Energy and Tractebel or Suez**  
13 **organizations today?**

14 A. **Schopman Appendix No. 1** (which is the same diagram as **Barry Appendix No. 1**)  
15 is a schematic diagram that summarizes the current ownership of Trigen KC, its sister district  
16 heating and cooling systems and other affiliates related to their respective operations. As you  
17 can readily see, Trigen KC remains a wholly-owned subsidiary of Trigen Energy, which in  
18 turn is owned by Suez-Tractebel, S.A. and by Suez S.A.

19 **Q. What significant changes and improvements have been made to the system and**  
20 **facilities since the 1990 purchase from KCPL?**

21 A. The Grand Avenue steam production plant and downtown distribution network had  
22 suffered from many years of neglect and decline. To address this, Trigen made significant  
23 investment in the plant and systems over its tenure. The plant had been fueled by high cost

1 natural gas during the final years of KCPL ownership. Trigen quickly implemented the  
2 necessary overhauls and modifications to equipment to enable the plant to burn local  
3 Missouri coal, a much more cost-effective fuel. A series of other upgrades followed; for  
4 example, the installation of a back-pressure turbine, which greatly improved the resource  
5 efficiency of the plant and system. Extensive tube work was done to bring the boilers up to a  
6 more reliance standard. Significant modernizing of boiler control systems took place and,  
7 coupled with the installation of a modern electrostatic precipitator, the plant has raised its  
8 level of operating and environmental performance. Trigen also made significant investments  
9 in upgrading the distribution system, replacing more than 80% of the leak-prone low-  
10 pressure system with high-pressure piping. The distribution system is in vastly better  
11 physical shape than it was at the time of the KCPL acquisition, resulting in less street vapor  
12 and better system efficiency through reduced thermal losses.

13 **Q. Mr. Schopman, did the change in ownership and organizational structure**  
14 **impact Trigen KC's operations?**

15 A. Trigen Energy moved the system forward in a different way from that of its previous  
16 owner. The district steam systems that proliferated throughout the United States during the  
17 first half of the twentieth century frequently were owned and operated by electric utilities.  
18 Entering the 1970s and 1980s, these owners typically placed far more emphasis on the  
19 electric side of their businesses, which represented ninety-five percent or more of their  
20 revenue stream. When the Steam System was acquired from KCPL in 1990, it had suffered  
21 through years of relative inattention and stagnant growth during which KCPL, like so many  
22 of the other large electric companies, was more interested in liquidating the system than in  
23 investing additional capital for its growth. In fact, in 1986, KCPL initiated a filing before

1 this Commission, effectively seeking to abandon the business. Trigen Energy had a different  
2 vision and began acquiring steam systems and stabilized them with an influx of new capital  
3 and a keen understanding of the efficiencies that can be realized by utility and customer alike  
4 in a well-run district steam system.

5 **Q. What was Trigen Energy's approach to owning district energy systems?**

6 A. Trigen Energy facilitated incremental growth by bringing together numerous district  
7 energy systems. By aggregating these systems together, Trigen Energy demonstrated a  
8 commitment to the district energy industry and further was able to provide a corporate  
9 infrastructure that facilitated large infusions of capital beyond the means of each individual  
10 system, greater engineering expertise and the development of corporate "best practices."

11 **Q. Has that support continued up to the present time?**

12 A. Support has been much more limited since 2002. In the past two years, Suez and  
13 Tractebel have done what is necessary to maintain the Steam System, but have not attempted  
14 to expand it or to undertake major new improvements. The impact on Trigen Energy has  
15 been twofold. First, in an effort to consolidate operations, Tractebel closed the Trigen  
16 Energy corporate office in White Plains, New York, eliminating approximately 175  
17 positions. Many of the corporate and management functions have been consolidated into  
18 Tractebel's Houston, Texas offices, including some of the duties that had been performed on  
19 site at each of the operating companies. Second, as part of a broad and long term business  
20 strategy, the decision was made for Suez and Tractebel to divest themselves of their entire  
21 portfolio of district heating and cooling systems in eight eastern and mid-western cities. This  
22 divestiture will be accomplished by Trigen Energy's sale to Thermal North America of the  
23 stock and partnership interests of the entities owning and operating these district steam

1 systems. Trigen Energy will continue to own other energy assets that are a better fit with the  
2 Suez portfolio. Mark Barry testifies as to this shift in direction.

3 **Q. How do you believe the proposed change in ownership will affect Trigen KC?**

4 A. I believe the change will be positive for several reasons. First and foremost, the  
5 change will provide greater support for all phases of Trigen KC's operations, which is a clear  
6 and affirmative benefit to the public resulting from this proposed transaction. This concept is  
7 clearly in keeping with the Missouri Public Service Commission's standard that there be no  
8 detriment to the public interest. This is plainly evident when comparing the business  
9 purposes and core competencies of the entity seeking to divest of the system and the entity  
10 seeking to acquire the system. Ever since the White Plains' office was closed and operations  
11 were managed out of Tractebel's Houston office, the difference in business focus was readily  
12 apparent. For example, the entire Trigen Energy White Plains' office was devoted to owning  
13 and operating energy facilities that focused on the efficiencies of producing electricity, steam  
14 and chilled water simultaneously, with a strong emphasis on district steam systems. In  
15 contrast, the systems being sold account for less than ten percent of Tractebel's North  
16 American revenues. As will be discussed further in Mr. Barry's testimony, Tractebel's long  
17 term strategy focuses on the arbitrage opportunities presented by the operation of electric  
18 generation facilities and the sale of natural gas. Given this difference in core business  
19 emphasis, Tractebel's Houston office does not provide the same level of support we  
20 experienced when White Plains still was operating.

21 **Q. Can you give me some examples?**

22 A. Certainly. Trigen Energy developed many proprietary products that provided it with  
23 a competitive advantage in the market place. Each system acquisition or industrial



1 outsourced location was recognized to be a unique system. Rather than approach a system  
2 with the mindset to use off the shelf products and technologies, White Plains went the “extra  
3 mile” to provide efficient and environmentally responsible energy to its customers.  
4 Examples of these proprietary products are the development of insitu foam insulation  
5 products for re-insulating district energy infrastructure; trigeneration machines which  
6 simultaneously make electricity and two forms of thermal energy (*i.e.*, steam and chilled  
7 water) from a single source; and metering and billing technologies which have allowed us to  
8 drive down operating costs while decreasing lost and unaccounted for steam. Tractebel’s  
9 Houston-based operations, on the other hand, rely almost exclusively on off-the-shelf  
10 technology to build its merchant power plants and then rely on market forces to provide  
11 arbitrage opportunities. In addition, while the core steam producing assets have been well  
12 maintained, upgrades and maintenance have been deferred on such items as fleet and  
13 building maintenance. Similarly, customer relations and marketing budgets have been pared  
14 down significantly during the past two years.

15 **Q. What is the second reason you believe the sale will benefit Trigen KC?**

16 A. The needs of the business have shifted once again. When the system was initially  
17 purchased, world energy pricing was relatively stable and the impacts of environmental  
18 legislation was well known. Of course, today’s energy markets are experiencing  
19 unprecedented volatility which, if not managed properly by Trigen KC, has the potential to  
20 result in dramatic shifts in costs of production. Additionally, if not carefully managed, ever  
21 increasing environmental legislation has the potential to compound the fuel expense issues by  
22 forcing a switch to different fuels. One of the strengths that Thermal North America brings  
23 to the proposed sale is its willingness to devote their cadre of resources in these areas and the

1 ability to leverage their experience and resources from the other district energy systems to the  
2 mutual benefit of Trigen KC and its Steam System customers.

3 **Q. Are there other reasons why you believe the sale to Thermal North America will**  
4 **benefit Trigen KC?**

5 A. Yes. At this point in time, given the direction of Tractebel, its plans for the system  
6 are short-term rather than long-term. With the sale anticipated to close this calendar year,  
7 Tractebel is reluctant to invest significant new capital or to engage in financial hedging  
8 arrangements that will extend beyond the current heating season. In contrast, Thermal North  
9 America has the financial resources and expertise to address both the short- and long-term  
10 by, among other things, investing significant new capital in the business and engaging in  
11 longer term financial hedging transactions that will extend beyond the current heating season.  
12 These capabilities represent substantial benefits to the public and Trigen KC's customers.  
13 Another related reason is that of staffing. With the filing of the Application to approve the  
14 stock sale and the stated desire to close the transaction by December 31, 2004, it is  
15 increasingly difficult for us to retain in Houston some of the personnel who currently are  
16 running the back room functions but who recognize that their positions at Tractebel may be  
17 eliminated once Thermal North America shifts those duties to ThermalSource LLC. Having  
18 a lame duck in the owner's seat is not in the public interest.

19 **Q. The Application seeks expedited approval of the stock transfer. What are the**  
20 **reasons for that request?**

21 A. In addition to the reasons to which I just testified, today's business environment  
22 demands prompt action for the benefit of all stakeholders and the public. The transaction  
23 documents – which were negotiated at arm's length – require that all regulatory approvals be

1 obtained and the deal close by year-end 2004. From my experience, this is a reasonable and  
2 achievable time frame the balances the interest of the public, Trigen KC's customers, the  
3 Commission, the transaction parties and the participants in this proceeding. Delays in  
4 completing this proceeding will only postpone the planned operational and other changes,  
5 including additional investment and the creation of other business opportunities that  
6 represent some of the primary benefits of this transaction. Furthermore, delays in completing  
7 this transaction will have the result of leaving Tractebel with a single district energy system  
8 in its portfolio of assets. The natural outcome of that situation would be one in which even  
9 less investment and ever fewer resources will be devoted to the business. Having been  
10 integrally involved with the district energy systems for over seventeen years, I believe that  
11 Thermal North America, with the added resources of ThermalSource LLC and Johnson  
12 Controls, Inc., is particularly well-qualified to own and operate the Steam System and I urge  
13 the Commission to approve the Application without further delay.

14 **Q. Why have Suez and Tractebel decided to sell their interest in, among other**  
15 **things, the Steam System?**

16 A. For strategic reasons unrelated to the specific operation of the Steam System, Suez  
17 and Tractebel have decided to divest themselves of the district heating and cooling systems in  
18 eight (8) Eastern and Midwestern cities in the United States owned and operated by various  
19 subsidiaries of Trigen, which collectively may be referred to as the "DHCS Portfolio." Mark  
20 Barry discusses these reasons in his testimony.

21 **Q. Mr. Schopman, does that conclude your testimony?**

22 A. Yes. However, I reserve the right to submit rebuttal testimony at a later date if it is  
23 necessary or desirable.

**Schopman Appendix No. 1**

