

Exhibit No.

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Filing Requirements,
Rate Design, Proposed
Rate Increase, Changes
to Rules & Regulations

Witness: Brian P. Kirk

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Sponsoring Party: Trigen-Kansas City

Case No. HR-2008-_____

Date Testimony Prepared: March 3, 2008

BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF MISSOURI

DIRECT TESTIMONY

OF

BRIAN P. KIRK

TRIGEN-KANSAS CITY ENERGY CORP.

TABLE OF CONTENTS
DIRECT TESTIMONY OF
BRIAN P. KIRK

Section	Adjustment/ Schedule	Testimony Reference
Education and Experience		1
Minimum Filing Requirements		3
Overview of Trigen's Rate Filing		4
Trigen's Business Operations		8
General Rate Structure		14
Rate Design		20
Truman Medical Center		25
Industrial Process Steam & Retail Tariff Customers		26
Financial Status and Prospects for the Future		31
Fuel & Consumables		37

Attachments

Schedule BK-1	Letter of Transmittal
Schedule BK-2	Aggregate Annual Increase
Schedule BK-3	Names of Counties and Communities Affected
Schedule BK-4	Press Releases
Schedule BK-5	Summary of Reasons for Proposed Rate Change
Schedule BK-6	Summary of Proposed Changes to General Rules & Regulations

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
DIRECT TESTIMONY OF BRIAN P. KIRK
ON BEHALF OF TRIGEN-KANSAS CITY ENERGY CORP.
CASE NO. HR-2008-_____**

1 Q. Please state your name and business address.

2 A. My name is Brian P. Kirk and my business address is Trigen-Kansas City Energy
3 Corporation, 115 Grand Avenue, Kansas City, MO 64106.

4

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

6 A. I am employed by ThermalSource, LLC, as Vice President & General Manager of
7 Trigen-Kansas City Energy Corporation (referred to in this document as "Trigen"
8 or the "Company").

9

10 **EDUCATION AND EXPERIENCE**

11 Q. Please describe your educational background and professional experience.

12 A. I received a Bachelor of Engineering in Marine Engineering from SUNY
13 Maritime College-Fort Schuyler in 1983 and a Juris Doctor degree from Fordham
14 University School of Law in 1993. I am licensed to practice law in the states of
15 New York and Missouri; however, I do not presently do so in either jurisdiction.
16 I began my career as an engineering officer in the US Merchant Marine in 1983
17 and worked for three years on various ocean-going vessels. I joined the
18 Consolidated Edison Company of New York in 1986 and held supervisory and
19 managerial positions in power generation and steam distribution. In 1995, I
20 joined Trigen-Kansas City Energy Corporation as a project manager. Since that

1 time, I have held various positions within the Company up to my current position
2 as Vice President & General Manager.
3

4 Q. Have you ever testified before this Commission or any other regulatory
5 commission?

6 A. In 1999, I testified briefly in front of this Commission in relation to the then-
7 pending affiliate transaction rules. In 2005, I testified before this Commission in
8 a complaint case regarding the compelled removal of a section of Trigen's piping
9 network to accommodate the prospective Sprint Center Arena. In 2006, I
10 presented testimony and appeared as a witness regarding Trigen's application to
11 expand its service territory (Case No. HA-2006-0294).
12

13 Q. Please summarize the purpose and content of your testimony.

14 A. The purpose of my testimony is to discuss the nature of Trigen's steam service in
15 Kansas City, provide a history of the district steam heating business in Kansas
16 City, present technical aspects of the system, describe characteristics of our
17 customer base, discuss recent developments relating to the system (including the
18 significant progress achieved despite challenges facing the system), and
19 summarize the need for requested relief in the form of increased tariff revenue
20 and proposed new rate design. I am also sponsoring the Company's minimum
21 filing requirements ("MFRs").
22
23

MINIMUM FILING REQUIREMENTS

1
2 Q. How did Trigen satisfy the minimum filing requirements set forth in the
3 Commission's rules for purposes of this case?

4 A. In order to address the specific requirements of 4 CSR 240-3.030, the following
5 information associated with the filing of this case was prepared by me or under
6 my direction and supervision:

7 A: Letter of transmittal (Schedule BK-1)

8 B: General information, including:

9 1. the amount of dollars of the aggregate annual increase and the
10 percentage of increase over current revenues which are proposed
11 (Schedule BK-2);

12 2. names of the counties and communities affected (Schedule BK-3);

13 3. the number of customers to be affected in each general category of
14 service and in all rate classifications (Schedule BK-2);

15 4. the average change requested in dollars and percentage change from
16 current rates for each general category of service and for all rate
17 classifications (Schedule BK-2);

18 5. the proposed annual aggregate change by general categories of service
19 and by rate classification (Schedule BK-2);

20 6. copies of any press releases relative to the filing issued by the
21 company prior to or at the time of filing (Schedule BK-4); and

22 7. a summary of reasons for the proposed changes (Schedule BK-5).

23 These MFRs are attached to this testimony as the schedules referenced above.

1

2 Q. Has a proof of revenue analysis been prepared by you or under your direction for
3 purposes of quantifying the aggregate annual rate increase requested by the
4 Company as well as the impact on each rate classification?

5 A. Yes. A proof of revenue analysis has been prepared which supports the amount
6 and percentage rate increases set forth on Schedule BK-2.
7

8

OVERVIEW OF TRIGEN'S RATE FILING

9 Q. Please summarize the rate relief sought by Trigen in this proceeding.

10 A. Trigen has not been before this Commission to seek a rate increase since its
11 acquisition of the system in 1990.¹ Despite the increases in fuel, operating and
12 maintenance costs over those years, as well as changes to Trigen's plant and
13 system, the Company still collects essentially the same amount of revenue for a
14 unit of steam sold to tariff customers as it did eighteen years ago. As one might
15 expect, the increase in Trigen's costs for delivering its service have since far
16 outpaced its growth in revenues, but perhaps nowhere is this effect more stark
17 than in the steam energy or usage component of revenue. Steam rates remain tied
18 to 1990 fuel and consumable prices, but what Trigen is actually paying for these
19 commodities are what they cost in 2008.

20 Separate from the need to better align costs and revenues, advances in
21 metering technology have taken place since 1990. These advances, which
22 include steam demand registering and improved data recording, have enabled us

¹ In 1990 the steam system serving downtown Kansas City was divested by Kansas City Power and Light (KCPL). Trigen-Kansas City is the surviving entity.

1 to design a new, demand-based rate structure. For a number of larger customers,
2 we have proposed a rate structure that puts these enhanced capabilities to work
3 and can help both Trigen and the customer to better monitor steam usage and
4 demand, giving the customer an opportunity to manage their energy needs.

5 The Company has conservatively approached the quantification of overall
6 revenue requirement in this proceeding, and has employed a historical test year
7 for the twelve months ended December 31, 2006, updated for significant known
8 and measurable changes through October 31, 2007. Even though Truman
9 Medical Center did not commence receiving steam in 2007, Trigen has
10 recognized the anticipated margins from this new customer in the rate case filing.

11

12 Q. Is Trigen seeking to recover its entire revenue deficiency by means of this rate
13 case? If not, why?

14 A. Trigen's rate case filing supports a calculated revenue deficiency of about \$2.6
15 million. Trigen is requesting, and the new tariffs filed by Trigen would result in a
16 more modest rate increase of \$1,228,000. The Company has not filed tariffs
17 seeking to increase rates to cover the entire calculated revenue deficiency. Trigen
18 thinks it is prudent to limit the amount of the rate change we are imposing on our
19 business customers through this rate proceeding for several reasons.

20 First, it has been eighteen years since Trigen's steam tariff rates were
21 changed. During that period, the organization and ownership of Trigen-Kansas
22 City has changed several times. Trigen's existing book depreciation rates were
23 authorized by the Commission in the late 1980's, when the steam distribution

1 system and the steam production facilities were owned by KCPL. We are
2 proposing to change those depreciation rates for the first time in twenty years. As
3 the Commission is well aware, under prior ownership, the Company inadvertently
4 overlooked the regulatory requirement that our plant accounting must conform to
5 net original cost at the time of our purchase of the steam properties in 1990. Over
6 the last several years, the Company has committed resources to correct that
7 deficiency and now maintains its accounting records on a net original cost basis.
8 Furthermore, the Company agreed to maintain its accounting records in
9 conformance with the FERC uniform system of accounts, rather than the system
10 we inherited from prior owners.

11 Second, we also identified a need to modernize our tariff structure and
12 related billing determinants. In the most recent two to three years, Trigen's
13 customer load, steam sales and revenues have grown dynamically compared to the
14 fifteen preceding years of Trigen's history. The cumulative effect of these
15 changes on our plant and system are still in the process of being assimilated, and
16 in fact the growth in load and revenue continues to be dynamic. In light of this,
17 Trigen decided it was wise to move more moderately on cost recovery and
18 structural change to rates. The changed rate structure as modeled accordingly
19 recovers significantly less than the calculated revenue deficiency, as noted above.
20 This approach is intended to provide flexibility in integrating the effect of these
21 various changes into Trigen's first Missouri rate case in the Company's history.

22 Third, we continue to work on other strategies (e.g., efforts to reduce
23 costs, add new customers, increase sales, etc.) that are expected to produce future

1 benefits and further mitigate our need for rate relief. Rather than rely on our
2 existing regulated customers as the first source of covering our earnings shortfall,
3 it has been and continues to be our goal and objective to implement additional
4 strategies before seeking additional rate relief beyond our pending filing. We
5 have had success on these fronts in recent years, increasing annual revenues since
6 2005 by an expected \$7 million once Truman Medical Center achieves full year
7 results. We are optimistic that continuing success with these pro-active measures
8 will in itself serve to further reduce the earnings shortfall of their own accord, and
9 with reduced need for future regulated rate relief.

10 Unlike many other regulated services, Trigen must compete with other
11 available options for 100% of the heating service it provides to its customers.
12 Trigen is therefore limiting its rate increase to moderate the impact on customers
13 and maintain its customer base, ultimately to the benefit of all ratepayers. With
14 all of our customers having other options for space heating supply, we want to do
15 what we reasonably can to retain them.

16 We would like to point out, however, that Trigen may find it necessary in
17 some future rate proceeding to seek recovery of its full revenue deficiency.
18 However, any subsequent rate proceeding would be commenced with an eye
19 towards maintaining a high level of customer value and provision of service that
20 is competitive with the offerings of our rivals. Obviously, any future rate relief
21 sought by Trigen would be based on a new test year.

22

23 Q. How is the Company proposing to implement this rate relief?

1 A. Trigen is proposing a new rate structure to recover both fixed and variable costs
2 of delivering service, just as its current rates appear to have been designed to do
3 when they were put in place. However, Trigen is proposing to recover most of its
4 overall revenue requirement through the usage charge component of the new tariff
5 rates. The usage charge component is driven primarily by fuel (i.e. coal and
6 natural gas) and consumable (i.e. water, sewer, electricity, etc) costs necessary to
7 produce a unit of steam.

8 These fuel and consumable inputs cost markedly less in 1990 when the
9 \$3.90/mlb level was set than they do today. For that reason, most of the rate and
10 revenue impact results from a proposed re-setting of the usage charge to reflect
11 the updated reality of the cost to produce steam energy. Trigen further proposes
12 to modify the means by which fixed charges are applied. The proposed rate
13 structure will be discussed in further detail below.

14

15 Q. Prior to the filing of this rate case, did Trigen notify its customers that the
16 Company would need to seek rate relief at some point in the future?

17 A. From time to time, I had informal discussions with various customers in which the
18 subject of a likely rate case was mentioned. The Company's customers were
19 notified of the rate case by letter shortly prior to the filing of this case.

20

21 **TRIGEN'S BUSINESS OPERATIONS**

22 Q. What is the nature of the business of Trigen-Kansas City Energy Corporation?

1 A. Trigen-Kansas City Energy Corporation owns and operates the district steam
2 system located in the central business district of the City of Kansas City, in an
3 area commonly known as the Downtown Loop and environs. Steam, as well as a
4 significant amount of electricity, is produced at Trigen's Grand Avenue Station in
5 a combined heat and power (cogeneration) process. The combined heat and
6 power process is especially well-suited for providing heating energy from a fossil-
7 fuel efficiency standpoint.

8 Trigen distributes steam through a network of approximately 6.5 miles of
9 pipe buried in the streets of Kansas City. At the present time, Trigen delivers and
10 sells that steam to approximately 56 retail customers, principally for space heating
11 purposes, within the downtown loop. The steam is also used by Trigen's
12 customers to humidify buildings, heat domestic water and, to a lesser extent, in
13 food service applications. Trigen's retail customers include commercial and
14 governmental office buildings, hotels and owners/managers of multi-unit
15 residential buildings. Included among these customers paying tariff rates for
16 steam service is Trigen-Missouri Energy Corporation (hereafter, "Trigen-
17 Missouri" or "Trigen-MO"), the Company's unregulated affiliate that utilizes
18 steam for the provision of chilling service in downtown Kansas City.

19 Steam is also sold to two relatively large industrial process steam users
20 with physical locations outside of the downtown loop. One is located in North
21 Kansas City and the other within the City of Kansas City. Steam is metered and
22 sold to these industrial process customers inside Trigen's plant, and is purchased
23 by each customer (i.e., metered) before it leaves Trigen's plant premises. Steam

1 purchased by these customers is routed through separate, dedicated pipelines
2 serving only those customers. All steam to these users is supplied under the terms
3 of negotiated contracts between each customer and Trigen. The process steam
4 customers are discussed in greater detail later in my testimony.

5
6 Q. Please describe Trigen-KC's steam heating business in downtown Kansas City.

7 A. As indicated previously, Trigen's service territory is largely confined to the
8 downtown loop or central business district of Kansas City, MO. Stated another
9 way, Trigen's services are available in the area roughly defined as being within
10 the I-35/I-70/I-670 highway loop; plus the River Market district; plus a four-block
11 wide extension from the southeast edge of the loop to the "Hospital Hill" area.
12 This latter area was appended to Trigen's service territory in 2006 pursuant to this
13 Commission's ruling in Case No. HA-2006-0294.

14 Trigen's territory is 100% overlapped by both Missouri Gas Energy
15 ("MGE") and Kansas City Power & Light ("KCPL"). The Company's service
16 also competes with customer production of heating energy using one or the other
17 of these utilities' services. Trigen itself happens to be a significant customer of
18 both of these utilities. The converse is not true, however, save for the small
19 amount of excess co-generated electricity that KCPL purchases from Trigen.

20 Trigen's steam production plant is located in the River Market district at
21 115 Grand Avenue. Bituminous coal from seams in the Missouri/Kansas and
22 Illinois Basin regions is the primary fuel source, and natural gas is the secondary
23 fuel source. Steam production capacity at Grand Avenue is greater than 1.2

1 million lbs/hour, and is delivered from the four boilers on site. Roughly half of
2 this capacity is capable of being fueled by coal. Given equipment redundancy,
3 the reliability of Trigen's steam service has been historically extremely high.

4
5 Q. With regard to Trigen-KC's regulated steam heating operations, please describe
6 the Company's current mix of customers and general load characteristics.

7 A. Trigen's regulated customer base is a mix of commercial office,
8 government/institutional facilities, hospitality, and event venue customers that are
9 served according to tariff rates. Although Trigen's commercial customers also
10 include owners/managers of multi-unit residential buildings, the Company does
11 not provide steam service directly to any residential customers.

12 In most cases, tariff customers use steam service primarily for space
13 heating. Tariff customers in general experience their greatest steam demand and
14 usage in the winter months.

15 One notable new tariff customer is Truman Medical Center. This is a
16 major hospital complex that will join the Trigen system following completion of a
17 new distribution pipe connecting it to Trigen's existing network. That work is
18 presently underway and Trigen district steam service is anticipated to begin late in
19 the first quarter or early in the second quarter of 2008. Truman is expected to
20 become Trigen's largest tariff steam customer (taking nearly twice the volume of
21 the second largest customer) when that project is complete.

22 Within the tariff customer base, variations in load characteristics exist.
23 Some buildings, such as event spaces or conference centers, are at one extreme, in

1 that they tend to have relatively high peak demands compared to overall energy
2 usage. Others, a prime example of which happens to be Truman Medical Center,
3 have multiple uses for steam in addition to space heating. As such, their energy
4 usage is spread more evenly throughout the year, as well as around the clock.

5
6 Q Is Trigen also engaged in district cooling efforts?

7 A. No. However, Trigen's affiliate, Trigen-Missouri, provides chilling service to a
8 number of buildings in downtown Kansas City.

9
10 Q. What is the nature of the business relationship between Trigen and Trigen-
11 Missouri?

12 A. Trigen's relationship to Trigen-MO is essentially a lessor-lessee and vendor-
13 customer relationship. Trigen-MO owns four chilling compressor units located at
14 Trigen's Grand Avenue Station. Trigen-MO also operates five chillers at the
15 Bartle Hall Convention Center Complex. Two chilling distribution loops, termed
16 the east loop and the west loop, are routed in the public rights-of-way. These
17 originate at the respective production sites and are also owned by Trigen-MO.

18 Because the east loop chillers occupy plant space at Trigen's Grand
19 Avenue Station, Trigen collects a lease payment from Trigen-MO keyed to the
20 space requirements used at Grand Avenue. Further, Trigen-MO shares employees
21 with Trigen. Timekeeping records are kept to allocate personnel costs between
22 the companies. Operating and maintenance costs associated with running the
23 Trigen-MO equipment are directly charged to Trigen-MO. Finally, Trigen sells

1 steam to Trigen-MO for motive power to run the chilling equipment at full tariff
2 rates. The specifics of cost allocation to maintain the separation of these distinct
3 business entities can be found in Trigen's Cost Allocation Manual, which is
4 submitted annually to the Commission.
5

6 Q. Do any synergies exist between Trigen and Trigen-MO that would inure to the
7 benefit of Trigen's customers?

8 A. As a winter-peaking utility, Trigen benefits from the improvement in load factor
9 presented by Trigen-MO's complementary steam consumption, which takes place
10 largely in the summer. Similar to the salutary effect that the process customers
11 offer to the Trigen system and existing customers in terms of off-season, off-peak
12 load, Trigen-MO also helps to flatten Trigen's steam load, while not imposing
13 significant sustained additional peak demand requirements on steam plant assets
14 in the high (winter) season. While the steam-driven chilling machines are in fact
15 used to some extent in the winter, the nature of chilling load requirements in the
16 winter months generally has an inverse relationship to heating (that is, steam
17 demand) needs. Therefore, deployment of these steam machines is subject to
18 greatly reduced use, and a high level of steam plant flexibility.

19 For example, non-peak heating times and periods of warm, mild winter
20 weather is generally the only time this chilling equipment sees use during the
21 heating season. Operation of steam-driven chilling equipment in the non-cooling
22 (winter) season is furthermore highly controllable by operators who ensure that
23 chilling machines do not operate coincident with times of high space heating

1 steam demand, rendering the effect of winter chilling steam demand
2 inconsequential. Moderate customer chilling demand and the operating
3 characteristics of Trigen-MO's chillers ensure that steam capacity for space
4 heating customers is not unduly affected by Trigen-MO's requirements.

5
6 Q Until fairly recently, Johnson Controls, Inc. ("JCI") provided operations and
7 maintenance ("O&M") services to Trigen, and most of the plant's labor force had
8 been employed by JCI. What is the current status of that arrangement?

9 A. As of September 30, 2007, our O&M relationship with JCI was terminated by
10 mutual agreement after being in effect approximately two years and three months.
11 This change had virtually no effect upon day-to-day job duties or performance by
12 the individual people involved in O&M activity, as of that date those personnel
13 re-joined the Trigen family (i.e., as employees of ThermalSource, LLC) and
14 O&M activities returned to direct Trigen control and ceased to be an outsourced
15 activity. For purposes of this rate case, pro forma O&M costs have been assumed
16 to be equivalent to those O&M costs actually experienced during the JCI
17 outsourcing.

18
19 **GENERAL RATE STRUCTURE**

20 Q. Are you sponsoring the rate structure proposed by Trigen?

21 A. Yes.

22 Q. How does the Company's existing rate structure compare to the structure of the
23 rates proposed in this rate case?

1 A. Trigen has endeavored to keep the new rate structure similar to the old rate
 2 structure, whenever feasible. For comparison purposes, the following table
 3 provides a summary overview of the structure of the Company's existing and
 4 proposed rates, excluding revenue taxes and late fees:

Existing Tariff Rates	Proposed Tariff Rates
<u>Standard Steam Service</u> Usage Charge Base Charge Minimum Charge	<u>Standard Commercial Service(SCS)</u> Steam Charge Meter Charge
No current large customer rate. Large and small customers are billed under standard steam service tariff.	<u>Large Commercial Service (LCS)</u> Usage Charge Demand Charge Meter Charge
No current similar rate.	<u>Interruptible Heating Service (IHS)</u> Usage Charge Capacity Charge Meter Charge
<u>Alternate Heating Source (AHS) Large</u> Energy Charge Capacity Charge Meter Service Charge	Discontinued. Qualifying customers on the AHS Large tariff may elect to take service under IHS schedule.
<u>Alternate Heating Source (AHS) Small</u> Usage Charge Capacity Charge Meter Service Charge	Discontinued. Qualifying customers on the AHS Small tariff may elect to take service under IHS schedule.
<u>Vacant Building Rider (VBR)</u> Energy Charge Base Charge	Discontinued.

5
 6 Q. You previously indicated that Trigen is proposing to recover most of the revenue
 7 requirement through a usage, or volumetric charge component, which is closely

1 related to the variable cost of generating each unit of steam. Explain the
2 reasoning behind this statement.

3 A. Trigen currently charges a flat commodity rate (usage charge) \$3.90 per thousand
4 pounds (hereinafter “mlb” or “MLB”) of steam sold to district customers. This
5 commodity (termed an “energy charge” or “usage charge” in the existing tariffs)
6 charge has remained fixed since 1990 and has not changed nor been adjusted for
7 general inflation, changes in fuel and consumable costs, nor for any other reason,
8 consistent with Commission rules. A unit of steam was priced at \$3.90 in 1990
9 dollars, yet that same unit of steam can still be purchased for \$3.90 in 2008.

10 Under both existing and proposed rates, this component of the Company’s
11 tariff rates was and is intended to recover the variable cost of commodities in the
12 form of fuel (chiefly coal, natural gas and electricity), and consumables (mainly
13 water, sewer charges, and water treatment chemicals) necessary to produce a unit
14 of thermal energy for delivery to the customer. It should come as little surprise
15 that in 2008 this commodity rate falls well short of the actual fuel and consumable
16 costs of production, and requires significant revision.

17 For the period from January 2000 through January 2008 alone, Trigen has
18 seen its annual fuel cost (which is predominantly driven by delivered coal cost
19 and to a lesser extent natural gas cost), increase by more than 100%. This is at the
20 very least consistent with generalized experience for energy costs over the years.
21 For further examples of the type of cost escalation that has occurred over the past
22 eighteen years, one needs only look at indices for certain commodities. In March
23 1990, when Trigen’s steam rates went into effect, the USDOL-Bureau of Labor

1 Statistics; Producer Price Index-Commodities; Natural Gas (Series ID WPU0531)
2 stood at 82.5. In March 2007, the same index reached 298.1, a greater than three-
3 fold increase. The story is similar for the other variable costs that Trigen incurs to
4 produce steam. Trigen's delivered costs for water and water treatment, purchased
5 electricity and sewer service have all increased significantly. Trigen's proposed
6 usage charge reflects the cumulative effect of these cost increases.
7

8 Q. Please describe the usage charge component of the proposed rates.

9 A. Trigen has proposed a usage charge of \$6.52/mlb for each unit of steam sold to
10 tariff district heating customers – a rate that covers only variable fuel and
11 consumable costs without any margin or return element. To be clear, \$6.52
12 represents the cost of raw materials, energy and consumables necessary to
13 produce one mlb of steam. This amount does not cover labor, maintenance, other
14 overhead costs or provide any return on our plant investment. The usage charge
15 will be a per-mlb charge that will be billed to all customers. It will appear as a
16 separate charge under the LCS and IHS tariff, and incorporated into a volumetric
17 structure as a component of the SCS tariff steam charges.
18

19 Q. Please explain this distinction between how the higher usage charge will be
20 reflected in the overall rate structure.

21 A. All classes of customer would pay the usage charge of \$6.52 for each mlb
22 consumed. Customers receiving service under the proposed LCS and IHS tariffs
23 (described below) will see this directly as a line item on their bill. Customers

1 receiving service under the proposed SCS tariff (described below) will also pay
2 \$6.52 per mlb consumed, but this usage charge component will be integrated with
3 the customer's contribution to fixed charge recovery. The integrated volumetric
4 charge is known as the "steam charge". The monthly bill for a SCS customer
5 will be made up of this steam charge and a monthly meter charge. The new
6 proposed rate structures are discussed in greater detail in the Rate Design section
7 of this testimony.

8
9 Q. Are you proposing any other changes to the tariffs, specifically as to the General
10 Rules & Regulations contained in the tariff?

11 A. Yes, though these are less significant than the changes Trigen has proposed to the
12 Rate Schedules.

13
14 Q. Can you explain what changes were made to the Rules and Regulations and the
15 reasons for those changes?

16 A. Schedule BK-6 identifies and briefly describes the limited changes the Company
17 has proposed to the General Rules & Regulations. Each entry notes the sheet
18 number, the section in which the change was made and a brief explanation for
19 each change. There are basically three categories of changes. The first (Category
20 1) is the least substantive, correcting typos, clarifying original intent and making
21 grammatical changes. This category consists of the majority of changes.
22 Category 2 consists of edits that take account of the changes that have been made
23 to the rates themselves. For example, references to the discontinued AHS Tariff

1 have been deleted. The third category (Category 3) of changes consist of the most
2 substantive and reflect material changes to the prior rules which have the effect of
3 changing the respective rights and/or obligations of the Company and deserve
4 special mention.

5
6 Q. Can you please describe each of the specific changes being proposed by the
7 Company in the third category you have described?

8 A. Yes. There are only four of these changes. The first is on Sheet 9, in Section 2.7,
9 where the Company is proposing a change in the interest rates for late charges
10 from a fixed rate of 6% to variable rate tied to Prime Rate. The second change on
11 Sheet 19, Section 4.11 allows the Company the discretion to not impose higher
12 security deposits on customers. The third change, on Sheet 29, in Article 10,
13 allows the Company to make changes to its form of steam supply agreement
14 where appropriate. The fourth change, added to Section 3 on Sheet 30, allows the
15 Company to charge a termination fee. The rationale behind the termination fee is
16 to protect Trigen's remaining customer base from responsibility for costs related
17 to additions to plant in order to serve new customers, to the extent those costs
18 remain unamortized. Under this provision the departing new customer bears
19 responsibility for costs incurred to connect such customer.

20

21

22

23

RATE DESIGN

1
2 Q. Please describe the changes in overall rate design that Trigen is seeking in this
3 proceeding.

4 A. With the advent of improved metering technology over the past eighteen years,
5 Trigen has been able to retrofit most of its larger customers with demand-
6 registering steam flow meters, replacing, in select instances, condensate drum
7 meters. This has facilitated the utilization of these features in designing an
8 updated tariff structure for such customers. We feel the capabilities of these
9 meters, linked to a new billing system and billing determinants, can allow Trigen
10 to more closely measure customer loads on the system, and enable the customer to
11 more directly influence and manage their own cost of steam heating service in the
12 future.

13 For the remainder of Trigen's customers, it is not practical to install
14 demand-registering meters. For these customers, condensate usage meters will
15 remain in place. As to rate structure, we have proposed integrating the usage
16 charge referred to above into a volumetric "Steam Charge" that also recovers
17 these customers' contribution to fixed costs.

18 Customers currently receiving service under existing standard tariffs will
19 therefore be divided into two classes, Standard Commercial Service (Rate
20 Schedule "SCS") and Large Commercial Service (Rate Schedule "LCS"). There
21 is a third new tariff class, designated as Interruptible Heating Service (Rate
22 Schedule "IHS"), also described below.

23

1 Q. Please describe the LCS tariff:

2 A. For the larger customers, defined as those customers taking greater than 5,000
3 mlb on average in a calendar year, we propose to meter and record hourly demand
4 data, which will be used to determine each LCS tariff customer's peak hour
5 demand charge. This peak-hour based demand charge will be billed in equal
6 monthly installments over the course of the year. The demand charge component
7 of our proposed LCS tariff would replace the existing "base usage" charge
8 mechanism used to set the fixed rate component. The demand charge installment,
9 in addition to the usage charge applied to metered steam volumes (in much the
10 same way it is under existing rates), and the meter charge, will be included in
11 each LCS customer's monthly bill.

12 It should be pointed out that the new demand meters are, generally
13 speaking, best-suited to those customers with relatively larger overall steam
14 requirements. By extension, these customers are the ones to whom a demand-
15 based rate would apply. For some customers with usage patterns below a certain
16 volume, installation and proper registration of demand meters can be impractical
17 or perhaps impossible. In other cases, it may be technically possible, but
18 economically unattractive due to installation cost, relative to steam volumes.

19 Further in support of proposing a demarcation for the availability of
20 demand meters, and therefore demand-based rates, is the possibility that demand
21 exerted by larger users may materially affect Trigen's capacity to deliver steam.
22 A corollary is that if these larger customers were to more proactively and

1 effectively manage demand, the customer's impact on the Trigen system would be
2 moderated and such effect would be reflected on the customer's steam bill.

3 As set forth above, in many cases, demand-registering steam flow meters
4 are either impractical or not economically justified, so drum (condensate) meters
5 will remain in service for many customers. These devices cannot be
6 economically re-fitted to measure a customer's true steam demand, working best
7 as an accurate metering device for registering volumetric usage.

8 The fixed portion of the LCS rate will be a function of steam demand. It
9 follows that these generally larger customers that have demand meters in place (or
10 are capable of having them fitted) will have their fixed rate portion keyed to steam
11 demand.

12
13 Q. Please describe the SCS tariff:

14 A. The proposed mechanism for the balance of the customers currently receiving
15 service under the standard steam service rate, or those who will be receiving
16 steam service under the proposed Standard Commercial Service tariff, is different.
17 As pointed out above, these customers are not fitted with meters that register
18 demand, and utilize only a condensate (drum) meter(s). Therefore, SCS customer
19 contribution to fixed cost recovery is not keyed to steam demand. Rather, Trigen
20 proposes to include recovery of fixed or capacity costs to each unit of steam sold
21 to a customer. In the case of SCS service, this means elimination of the existing
22 "base usage" charge for these customers as well. However, as indicated above,
23 instead of imposing a separate monthly capacity, or "base charge" on these

1 customers, we propose to incorporate recovery of costs related to steam capacity
2 into a volumetric steam charge.

3 An advantage of this proposed structure is that it would tie these smaller
4 customers' bills more closely in time to that period when actual units of steam are
5 used. We believe this more simplified system should be attractive to smaller
6 customers, as they will receive a bill with charges assessed closer in time and
7 magnitude to the actual usage than is the case under our existing tariffs where the
8 base charge was applied in each month of the year. For all classes of customers,
9 Trigen is also proposing meter and/or customer charges to be assessed to accounts
10 on a monthly basis.

11

12 Q. Trigen has proposed to eliminate the Vacant Building Rider (VBR) and the
13 Alternate Heating Source AHS (small and large) tariffs, and proposes a new
14 "Interruptible Heating Service" (IHS) tariff. Explain why and discuss the
15 alternatives remaining for those customers affected.

16 A. Trigen originated the AHS rate schedule (which essentially offers a steep base
17 usage charge discount to customers that maintain a boiler in standby condition) in
18 the early 1990's. While the historical purpose for this rate is not known for
19 certain, it was apparently instituted as a means to attract and retain customers for
20 the Trigen system that might have selected competing options for space heating.
21 My own belief is that the AHS rates (i.e., AHS small and AHS large) were
22 designed to be a discounted rate for load attraction/retention.

1 I believe the VBR was instituted to provide a means for customers to heat
2 buildings that were vacant and awaiting rehabilitation. The rate also offered a
3 discount, apparently in recognition of limited cash flows likely to be at the
4 disposal of such owners. Similar to the AHS rates, my belief is that the VBR rate
5 was designed also to allow Trigen to attract or retain loads that might have been
6 vulnerable to competitive options.

7 Trigen proposes to eliminate both the VBR and AHS rate schedules. This
8 is because the form in which the current rate schedules are now structured does
9 not benefit Trigen's customer base on the whole. Both existing rate schedules
10 provide substantial discounts relative to the standard fixed charges imposed on
11 other customers. The one customer currently taking service under the VBR
12 schedule would migrate to the applicable new tariff. Furthermore, the VBR
13 customer should have some flexibility to manage its usage in vacant space to
14 sufficiently control costs, absent the discount. If not, the customer could seek
15 other space heating options.

16 Current AHS customers, on the other hand, may be able to qualify for a
17 rate other than SCS or LCS, but only if certain qualification can be met. The
18 proposed IHS rate, while continuing to offer customer cost advantages relative to
19 the standard commercial rates, now requires electing and qualifying customers to,
20 in turn, provide a benefit back to the overall steam system and customer base.
21 This benefit is in the form of the availability of system demand relief afforded by
22 the qualifying customer, in the event of capacity constraint on the part of Trigen.
23 Trigen is proposing that existing AHS customers with fully operable boilers, and

1 who otherwise meet the requirements for IHS service, would migrate to IHS.
2 AHS customers who for whatever reason cannot (or choose not) to qualify for
3 IHS service would in turn migrate to SCS or LCS, as applicable. Notwithstanding
4 any lack of eligibility for IHS service, Trigen believes its proposed rate tariffs,
5 whether Standard Commercial Service (SCS) or Large Commercial Service
6 (LCS) as the case may be, will be sufficiently attractive to retain similarly-
7 situated district heating customers.

8
9 Q. How does the capacity charge under the existing AHS Large tariff compare to the
10 capacity charge under the proposed IHS tariff?

11 A. The proposed IHS capacity charge rate element, for those qualifying and electing
12 customers, remains unchanged from the current AHS Large tariff.

13

14 **TRUMAN MEDICAL CENTER**

15 Q. In May 2006, this Commission granted Trigen's application to extend its
16 certificated service territory in Kansas City (Case No. HA-2006-0294). Can you
17 provide an update on development/construction activity by Trigen in the time
18 since?

19 A. Much of the time following grant of the certificate extension in 2006 was
20 concerned with extensive detail work including route assembly, survey work, and
21 the engineering and design effort required in advance of actual construction.
22 Trigen also executed all agreements related to construction of the project as well
23 as the contract setting forth TMC's funding of the project. Actual physical

1 construction work subsequently commenced in the second half of 2007. TMC is
2 currently expected to be connected to the Trigen system by late in the first or
3 early in the second quarter of 2008. At this point, we anticipate that customer
4 volume and revenue assumptions presented in the certificate case will remain
5 substantially the same.

6
7 Q. Has Trigen recognized the pro forma effect of that extension and new customer
8 load in quantifying overall revenue requirement?

9 A. Yes. We have recognized the pro forma effect of the extension and additional
10 customer sales to Truman Medical Center. Addition of this customer is
11 significantly accretive to earnings and is instrumental in mitigating Trigen's
12 overall revenue deficiency. Along with Trigen's other successful business growth
13 initiatives, the addition of Truman Medical Center helps to constrain the rate
14 increase request in this case to a level significantly less than it would have been
15 otherwise.

16

17 **INDUSTRIAL PROCESS STEAM & RETAIL TARIFF CUSTOMERS**

18 Q. Besides commercial building customers located in the downtown district that take
19 steam service primarily for space heating and related uses, Trigen also serves
20 industrial process customers with significantly different uses for the steam.
21 Which customers are these?

22 A National Starch and Chemical Co. ("NSCC") and Cargill, Inc. each operate
23 industrial processing plants that make significant use of Trigen steam for their

1 respective purposes. At present, the two are the largest consumers of Trigen's
2 steam for their respective processes. NSCC has been an industrial process steam
3 customer since the mid-1970's, and Cargill has been a customer since mid-2006.

4

5 Q. Could you explain the distinction between industrial process steam customers and
6 district heating customers?

7 A. Yes. The process customers utilize Trigen's steam to produce an agricultural end-
8 product, for example corn starch in the case of NSCC and soybean oil in the case
9 of Cargill, rather than for space heating. In that sense, consumption is dictated by
10 process requirements. This is in contrast to tariff-based space heating loads
11 which, generally speaking, tend to be driven by ambient weather conditions and
12 the resulting need to heat the occupied spaces of buildings.

13 The nature of these agricultural product processes is such that steam is
14 generally used around the clock virtually 365 days per year, at relatively large
15 volumes, with more or less steady loading characteristics. With some notable
16 exceptions, district tariff customers use steam predominantly during business
17 hours in the winter season, with off-season and nighttime usage trailing off
18 considerably. The primary exception to this would be tariff steam sold to
19 Trigen's affiliate (Trigen-Missouri) as an energy source to drive chilling
20 compressors. As explained earlier in my testimony, chilling service demand is
21 naturally highest in the summer when air conditioning demand is at its peak.
22 Among other tariff customers, hospitals, hotels and residential buildings have
23 nighttime usage and some level of off-season usage for some miscellaneous

1 purposes such as domestic hot water heating, laundry, sterilization or, in some
2 cases, for their own chilling equipment.

3
4 Q. Explain the key differences in terms of delivery of service between process and
5 district (tariff) customers.

6 A. Tariff customers are physically located and use steam within Trigen's certificated
7 service territory. All steam is provided to these customers according to tariff
8 rates, rules and regulations approved by this Commission. As noted previously,
9 tariff customers' predominantly use steam for space heating purposes. Process
10 steam customers, on the other hand, use the steam for a quite different purpose, as
11 described above.

12 From Trigen's perspective, these two process customers, while employing
13 very different processes that use the steam internally, are very similar in that they
14 both take steam in comparable quantities and conditions. The steady steam
15 consumption and load factor advantages imparted to Trigen's system for decades
16 by NSCC have been compounded by the addition of Cargill. As Mr. Carver will
17 establish elsewhere, Trigen's tariff customers are helped by the contribution to
18 fixed cost recovery by NSCC. That beneficial effect is further enhanced by the
19 addition of Cargill.

20 Further, with respect to these customers, it is important to note that these
21 process steam customers are not connected to Trigen's steam distribution
22 network. Trigen's steam distribution system originates at Grand Avenue Station.
23 Steam is delivered to a piping network that resides underneath public downtown

1 rights-of-way, serving Trigen's tariff customers. The process steam customers
2 purchase and take delivery of their steam directly from Trigen's Grand Avenue
3 production facilities, according to terms and conditions arrived at through
4 bilateral agreement between the parties.

5 Referring again to these customers not being connected to Trigen's steam
6 distribution network, an important aspect of process steam sales is that such steam
7 is metered and purchased inside Trigen's Grand Avenue Station. This means that
8 the process steam customers bear the risk of line losses associated with delivery
9 of steam to their premises, unlike the retail tariff steam customers. The process
10 customers also enter into long term agreements (upwards of ten to twenty years)
11 that include fuel-related charges indexed by some means to Trigen's actual cost of
12 fuel. At present, features such as these are unavailable to tariff customers.

13

14 Q. Earlier, you discussed the Company's provision of steam service to retail tariff
15 customers and to industrial steam customers. How do the general load
16 characteristics of Trigen's industrial process steam customers compare to its mix
17 of retail steam customers?

18 A. These customers consume large quantities of steam virtually around the clock,
19 365 days a year. The process steam users are Trigen's largest in terms of steam
20 consumed by a significant margin. In 2007, the two process steam customers
21 purchased more steam than all tariff customers combined, by a significant margin.

22

1 Q. How have the process steam sales been treated for ratemaking purposes in this
2 case?

3 A. Trigen has taken the "revenue crediting" approach with regard to the process
4 steam customers. That is to say that the margins generated under the process
5 steam service contracts have been recognized in quantifying overall revenue
6 requirement for purposes of this rate filing. In our financial modeling for this
7 case, we have anticipated that both contracts will generate positive margins,
8 thereby reducing our overall revenue requirement. However, if the process steam
9 contracts were to cost more to perform than the fees they generate, the Company
10 would not seek recovery of any resulting deficiency through our proposed retail
11 revenue requirement. Instead of the revenue crediting approach, another
12 alternative could have been used to remove the margins and allocate/ assign costs
13 to the industrial process steam customers. Because of the complexity of this
14 process, the Company elected to employ the revenue crediting methodology in an
15 attempt to simplify this case and provide the regulated ratepayers with equitable
16 treatment. Mr. Steven Carver of Utilitech will speak to this issue in greater detail.

17

18 Q. Does the presence of the process customers impart any positive effect upon
19 Trigen, and how do Trigen's tariff customers benefit from Trigen's service to the
20 process customers?

21 A. The presence of the process customers relative to the provision of steam heating
22 service to the tariff-based district customers is wholly beneficial. Without the
23 steady, year-round requirements of the process loads, Trigen would not have the

1 steam loading necessary to support consistent coal combustion, forcing primary
2 use of higher-cost fuel much of the time and/or idling of coal capacity for as many
3 as eight months out of each year, due to the seasonal (winter) nature of the district
4 customers' usage. In other words, the presence of the process customers provides
5 a relatively constant base-load demand, enabling Grand Avenue Station to operate
6 in a more efficient load range and lower unit cost-of-production mode over the
7 entire year.

8 The presence of the process customers further serves to spread the fixed
9 costs associated with owning, operating and maintaining power plant assets. As
10 this Commission is aware, the energy utility business is capital and labor-
11 intensive. This reality manifests itself in terms of a utility's fixed cost. The
12 greater the number and larger the size of customers that can be connected to the
13 system inures to the benefit of all customers by reducing each customer's share of
14 fixed costs, thereby mitigating rate impact on existing tariff customers.

15
16 **FINANCIAL STATUS AND PROSPECTS FOR THE FUTURE**

17 Q. Describe Trigen's progress to date and plans to improve its financial situation.

18 A. Calendar year 2007 showed significant improvement over historical results and
19 2008 financial performance is on track to be better still.

20 To date, the most significant factor driving improved revenues and
21 margins are the recently-acquired customers, most significantly Cargill. More
22 recently, steam sales were again boosted with the addition of Sprint Center Arena.
23 The addition of Truman Medical Center later this year will further drive revenue

1 growth. Cargill itself has begun construction on a bio-diesel production plant, to
2 be followed soon after by a second soybean crush plant. It is expected this will
3 substantially increase steam volumes to Cargill, which should result in a
4 commensurate rise in revenues and margins. This organic growth is the primary
5 element of Trigen's nascent turnaround.

6 Also significant to Trigen's improvement plans is this rate case itself.
7 Having held rates (i.e., tariff rates and depreciation rates) essentially unchanged
8 for the eighteen years Trigen has operated the steam system, the Company has
9 found itself earning far less than its revenue requirement.

10 This further emphasizes the critical importance of the strong sales growth
11 of the past year or two, and the growth anticipated in the near-term to
12 intermediate future. Through the successful efforts to attract these substantial
13 customers, Trigen has greatly mitigated potential rate increases for existing tariff
14 customers. By adding these loads and associated revenues, Trigen has been and
15 will continue to be able to spread its fixed costs over a broader base of customers,
16 and to continue achieving fuel efficiencies by operating Grand Avenue at higher
17 load levels. In sum, Trigen has worked hard to provide value, without seeking
18 regulatory relief. One could say that Trigen has largely grown out of much of its
19 earnings difficulties, largely through its own efforts.

20 Our efforts have served to cumulatively reduce the revenue shortfall that
21 was anticipated just 18 months ago. Both Trigen and its existing, long-time steam
22 tariff customers benefit from these successful efforts to reduce the revenue
23 deficiency.

1

2 Q. You mentioned increasing steam loads that include adding Cargill as a process
3 steam customer, and the anticipated ongoing growth of this customer's steam
4 consumption, the new TMC load connected with the service territory expansion,
5 and the requirements of other new customer loads, such as the Sprint Center
6 Arena. Please describe how you are addressing the steam capacity situation at
7 Grand Avenue, before and after the addition of these significant new customer
8 loads.

9 A. It is true that Trigen will soon be producing and selling steam in far greater
10 physical volumes than ever recorded in Trigen's eighteen year history. Steam
11 sales (physical volumes) in 2008 are expected to be more than double those of
12 2005, which were roughly comparable to the flat-to-declining annual sales
13 volumes experienced the prior fifteen years. To provide perspective, Trigen
14 anticipates that we may sell more units of steam in 2009 to Cargill *alone* than
15 were sold by Trigen, system-wide, in 2005. This, therefore, raises the valid
16 question of adequacy of steam capacity going forward.

17 Even in light of the strong growth achieved in the recent months, Trigen's
18 installed capacity is more than ample to serve the new loads, while maintaining
19 consistent and reliable service to Trigen's longstanding customer base. Trigen
20 maintains more than 1,250,000 pounds per hour ("lb/hr") steam capacity at Grand
21 Avenue Station. On a system peak load day following addition of the new
22 customer loads, we do not anticipate a total system demand exceeding 500,000
23 lb/hr steam production. On the distribution side, Trigen benefits from an

1 extensive network of steam pipes that are sized, operated and maintained to
2 ensure steam is reliably delivered to customers at specified temperatures and
3 pressures.

4 Nevertheless, with an eye toward the future and the long planning cycles
5 required by utilities, Trigen is introducing an interruptible rate (described above)
6 in our proposed tariff. This rate will allow us to call on our customers to assist
7 Trigen in shaving peaks or otherwise reduce steam demand to achieve overall
8 system savings, should it become necessary. Based on our forecasts, Trigen does
9 not anticipate the need to avail itself of this reduction in steam demand with any
10 regularity. Nonetheless, implementation of this rate schedule allows for
11 integration of a valuable feature that exists in some buildings, into a system-wide
12 benefit, in return for rate treatment that recognizes this benefit.

13
14 Q. In quantifying overall revenue requirement, did Trigen recognize these recent or
15 anticipated new customer loads?

16 A. Yes and no. As discussed by Mr. Carver, Trigen did recognize additional tariff
17 sales to the Sprint Center and TMC. In addition, the Company also annualized
18 the margin associated with current levels of process steam sales to Cargill for
19 revenue crediting purposes. However, the anticipated growth of Cargill's
20 consumption was not recognized, as the timing and exact magnitude of that
21 change was too far beyond the known and measurable period.

22

1 Q. What other positive factors do you anticipate which may affect the business in the
2 near future?

3 A. Growing awareness of the environmental impact of customers' choice for energy
4 supply is generally favorable for Trigen. Trigen utilizes combined heat and
5 power, perhaps the most resource-efficient means to make use of fossil fuel,
6 particularly in the realm of space heating and process thermal requirements.

7 Recognition of the superior environmental benefits of combined heat and
8 power is real and growing. The USDOE, for example, encourages and promotes
9 utilization of combined heat and power. Trigen believes that growing awareness
10 of the need for conservation will raise the public's awareness and help drive the
11 expanded deployment of combined heat and power technology, and encourage
12 customers to choose Trigen.

13 With much of the current focus on demand-side (i.e., customer-driven)
14 efficiency gains, such as use of compact fluorescent lights and other consumer-
15 side energy savings measures, it is interesting to note that cogeneration as
16 practiced by Trigen is a very powerful and significant *supply-side* driver of
17 efficiency. In large part, by virtue of heating production through fossil-fuel
18 cogeneration, Trigen has accomplished a great deal of energy-conversion savings
19 before the energy is even delivered to the customer. We believe that Trigen's
20 inherently fuel-efficient process makes it a wise alternative, and recognition of
21 this fact will grow over time.

22

1 Q Despite the favorable trends in the business at present, what are the challenges
2 that Trigen faces going forward?

3 A. Trigen acknowledges that it is a very small niche player, relative to its
4 competitors, and that we lack the scale and resources these other participants
5 wield. Even though regulated by this Commission, each and every one of
6 Trigen's customers has a competing option for space heating. Recognition that
7 every customer has a choice motivates Trigen to provide the best value for our
8 customers' energy dollars. Our success in essentially doubling the size of the
9 business in a little more than two years, in the face of intense and highly
10 resourceful competition, would seem to indicate some measure of success in
11 getting this message across.

12 Given the nature of competition, Trigen's story of the past several years is
13 not marked only by successes. Trigen by no means is able to connect every
14 customer it pursues, and does experience some customer turn-over. Depending
15 upon the attractiveness of deals, incentives or terms offered to prospective and/or
16 existing steam customers by our competitors, Trigen will in some instances be
17 unsuccessful in adding new customer loads and/or retaining existing ones.
18 Generally speaking, though, Trigen has been able to hold its own and, for the
19 most part, sustain the advantage against its rivals, by demonstrating superior value
20 in the provision of space heating service to building owners and managers in
21 downtown Kansas City.

22 Many challenges remain, and not all are external. Although Trigen will
23 benefit from the expanded customer base in covering system fixed costs,

1 maintenance of the boilers, turbines, balance of plant and distribution assets will
2 continue, requiring ongoing capital investment and upkeep. While not foreseen in
3 the immediate future, at some point Trigen may need to make significant new
4 investment in major energy production equipment.

5 Another potential challenge for the future may involve station retrofits that
6 could be required for compliance with future environmental regulations. At
7 present, Trigen is in compliance and actively operates, maintains and manages its
8 assets to remain so. Even given the resource-efficient and generally
9 environmentally benign nature of Trigen's processes, the real possibility of the
10 need for emission/environmental upgrades in the medium- to long-term future
11 exists.

12 13 **FUEL & CONSUMABLES**

14 Q. Are you aware that Trigen's overall revenue requirement includes adjustments
15 that annualize fuel and consumable expense?

16 A. Yes. Mr. Carver and I have worked closely together in order to develop a
17 reasonably straightforward method to annualize fuel and consumable expense.

18
19 Q. Did you provide historical information that was used in the annualization of fuel
20 expense?

21 A. Yes. I provided Mr. Carver with statistical data regarding historical fuel mix, unit
22 efficiency and line loss. Based on this data, we developed a quantification

1 methodology that considers the key elements of our operations and reflects
2 attainable efficiencies with our expanded steam load.

3

4 Q. Did you also provide Mr. Carver with information to support recent delivered
5 costs for coal and gas?

6 A. Yes. Trigen has not based its fuel annualization on forecast or estimated fuel
7 costs. Instead, we annualized fuel expense based on late 2007 delivered prices for
8 coal and gas.

9

10 Q. Is Trigen proposing any type of fuel clause or fuel tracking mechanism be
11 implemented for the Company's retail tariff customers?

12 A. No. While Trigen's cost for fuel can be somewhat volatile and tends to increase
13 over time, we do not propose to institute a fuel adjustment mechanism in its tariff
14 rates. However, following implementation of new rates resulting from this
15 proceeding, Trigen may in a future rate proceeding consider a proposal for a fuel
16 tracking or fuel adjustment mechanism.

17

18 Q. Does this conclude your direct testimony?

19 A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**


In The Matter Of The Tariff Filing of Trigen-)
Kansas City Energy Corporation To Implement)
A General Rate Increase For Regulated Steam)
Heating Service Provided To Customers In The)
Company's Missouri Service Area.)

Case No. HR - 2008 - _____

AFFIDAVIT OF BRIAN P. KIRK


STATE OF MISSOURI)
) ss.
COUNTY OF JACKSON)

Brian P. Kirk, being of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form to be presented in the above case; that answers in said Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers: and that such matters are true and correct to the best of his knowledge and belief.



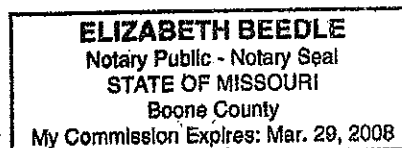
Brian P. Kirk

Subscribed and sworn to before me on this 5th day of March, 2008.



Notary Public

My commission expires: 3/29/2008





Trigen-Kansas City Energy Corporation

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March 11, 2008

Ms. Cully Dale
Secretary/Chief Regulatory Law Judge
Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102-0360

Dear Ms. Dale:

On behalf of Trigen-Kansas City Energy Corporation ("Trigen"), I am providing herewith to the Missouri Public Service Commission (the "Commission") for filing in electronic form certain tariff sheets consisting of revised steam rate schedules which are designed to increase Trigen's gross annual steam tariff revenues by approximately \$1,228,000, or 19.5%, exclusive of applicable gross receipts, sales, franchise or occupational fees or taxes. Also provided for filing in electronic form are certain tariff sheets consisting of revisions to Trigen's general rules and regulations. In addition, also included is the information required by 4 CSR 240-3.030(3)(B).

The proposed rate increase is driven by several factors. Trigen has not sought a rate increase since its acquisition of the system in 1990. Despite increases in fuel, operating and maintenance costs over those years, and changes to its plant and system as well as its capital structure, Trigen still collects essentially the same amount of revenue per unit of steam under its tariff rates as it did eighteen years ago. This filing seeks to better align Trigen's costs and revenues. However, it should be noted that Trigen is only seeking a rate increase of approximately \$1,228,000, although this rate case filing would support an increase of about \$2,600,000. Furthermore, advances in metering technology since 1990 have enabled Trigen to propose a new demand-based rate structure/rate design for its larger customers. Other proposed changes to rate structure/rate design, and certain revisions to Trigen's general rules and regulations, are also included in this filing.

The tariff sheets being filed are as follows:

P.S.C. MO. No. 1 Rates for Steam Service:

First Revised Sheet No. 1, Cancelling Original Sheet No. 1
First Revised Sheet No. 2, Cancelling Original Sheet No. 2
First Revised Sheet No. 3, Cancelling Original Sheet No. 3

First Revised Sheet No. 4, Cancelling Original Sheet No. 4
Third Revised Sheet No. 5, Cancelling Second Revised Sheet No. 5
Third Revised Sheet No. 6, Cancelling Second Revised Sheet No. 6
Second Revised Sheet No. 7, Cancelling First Revised Sheet No. 7
Third Revised Sheet No. 8, Cancelling Second Revised Sheet No. 8
Second Revised Sheet No. 9, Cancelling First Revised Sheet No. 9
First Revised Sheet No. 10, Cancelling Original Sheet No. 10
First Revised Sheet No. 11, Cancelling Original Sheet No. 11
First Revised Sheet No. 12, Cancelling Original Sheet No. 12
Second Revised Sheet No. 13, Cancelling First Revised Sheet No. 13
First Revised Sheet No. 14, Cancelling Original Sheet No. 14
First Revised Sheet No. 15, Cancelling Original Sheet No. 15
First Revised Sheet No. 16, Cancelling Original Sheet No. 16
First Revised Sheet No. 17, Cancelling Original Sheet No. 17
First Revised Sheet No. 18, Cancelling Original Sheet No. 18

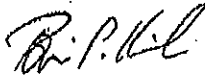
P.S.C. MO. No. 2 General Rules and Regulations:

First Revised Sheet No. 1, Cancelling Original Sheet No. 1
First Revised Sheet No. 2, Cancelling Original Sheet No. 2
First Revised Sheet No. 5, Cancelling Original Sheet No. 5
First Revised Sheet No. 8, Cancelling Original Sheet No. 8
Second Revised Sheet No. 9, Cancelling First Revised Sheet No. 9
First Revised Sheet No. 11, Cancelling Original Sheet No. 11
First Revised Sheet No. 12, Cancelling Original Sheet No. 12
First Revised Sheet No. 15, Cancelling Original Sheet No. 15
First Revised Sheet No. 17, Cancelling Original Sheet No. 17
First Revised Sheet No. 19, Cancelling Original Sheet No. 19
First Revised Sheet No. 21, Cancelling Original Sheet No. 21
First Revised Sheet No. 22, Cancelling Original Sheet No. 22
First Revised Sheet No. 23, Cancelling Original Sheet No. 23
First Revised Sheet No. 25, Cancelling Original Sheet No. 25
First Revised Sheet No. 27, Cancelling Original Sheet No. 27
First Revised Sheet No. 29, Cancelling Original Sheet No. 29
First Revised Sheet No. 30, Cancelling Original Sheet No. 30
First Revised Sheet No. 31, Cancelling Original Sheet No. 31

All of the listed schedules bear a date of issue of March 11, 2008, to be effective April 11, 2008.

Copies of this filing are being provided to the Commission's General Counsel and Staff, and two sets of this filing are being furnished this date to the Office of the Public Counsel.

Respectfully submitted,



Brian P. Kirk
Vice President & General Manager

Enclosures

Cc: Missouri Public Service Commission General Counsel
Office of the Public Counsel

TRIGEN-KANSAS CITY ENERGY CORP.

CASE NO. HR-

AGGREGATE ANNUAL INCREASE, INCREASE BY RATE CLASSIFICATION,
NUMBER OF CUSTOMERS AND AVERAGE INCREASE BY RATE CLASSIFICATION

Line No.	Existing Tariff (A)	Existing Tariff Revenues (B)	Proposed Tariff (C)	Proposed Tariff Revenues (D)	Proposed Change		Average Monthly Increase	
					Amount (E)	Percent (F)	Amount (H)	Percent (I)
1	Standard Steam Service (a)	\$ 679,124	Standard Commercial Service	\$ 799,085	\$ 119,960	17.7%	\$ 357.03	17.7%
2	Standard Steam Service (a)(b)	4,922,259	Large Commercial Service	5,784,842	862,383	17.5%	3,992.52	17.5%
3	Alternate Heating Source (c)	694,657	Interruptible Heating Service	940,313	245,656	35.4%	2,047.13	35.4%
4	Total	\$ 6,296,040	Total	\$ 7,524,040	\$ 1,228,000	19.5%		

Note (a): Trigen is recommending that the existing Standard Steam Service rate be split into two separate rate schedules: Standard Commercial Service ("SCS") and Large Commercial Service ("LCS").

Note (b): Trigen currently has one customer receiving service pursuant to the Vacant Building Rider rate discount, which reduces the customer's base charged. This customer is included in the existing Standard Steam Service and Large Commercial Service amounts set forth on Line 2. Trigen is proposing to discontinue the Vacant Building Rider rate schedule.

Note (c): The revenues under the existing Alternate Heating Source ("AHS") rate schedule include both the AHS Small and AHS Large rate schedules. Trigen is recommending that these AHS rate schedules be consolidated into a single Interruptible Heating Service ("IHS") rate schedule.

TRIGEN-KANSAS CITY ENERGY CORP.

CASE NO. HR-

SUMMARY COMPARISON OF EXISTING AND PROPOSED RATES

Existing Tariff Rates	Proposed Tariff Rates
<p><u>Standard Steam Service</u></p> <p>Usage Charge (per Mlb) \$ 3.90</p> <p><u>Annual Base Charge (a)</u></p> <p>First 500 Mlbs \$ 11.75</p> <p>Next 1,500 Mlbs \$ 10.00</p> <p>Next 4,000 Mlbs \$ 9.75</p> <p>Over 6,000 Mlbs \$ 9.40</p> <p>Minimum Charge (per month) \$ 50</p> <p>(a) Annual base charge rates, billed monthly, based on usage during October-March.</p>	<p><u>Standard Commercial Service</u></p> <p>Steam Charge (per Mlb)</p> <p>First 5 Mlbs \$ 23.50</p> <p>Next 20 Mlbs \$ 22.09</p> <p>Next 75 Mlbs \$ 19.00</p> <p>Over 100 Mlbs \$ 17.10</p> <p><u>Meter Charge (monthly)</u></p> <p>First Meter \$ 75</p> <p>Each Additional Meter \$ 50</p> <p><u>Large Commercial Service</u></p> <p>Usage Charge (per Mlb) \$ 6.52</p> <p><u>Annual Demand Charge (b)</u></p> <p>First 3 Mlbs/Hour \$ 14,250</p> <p>Next 2 Mlbs/Hour \$ 12,128</p> <p>Next 3 Mlbs/Hour \$ 11,825</p> <p>Over 8 Mlbs/Hour \$ 11,401</p> <p><u>Meter Charge (monthly)</u></p> <p>First Meter \$ 100</p> <p>Each Additional Meter \$ 50</p> <p>(b) Annual demand charge rates, billed monthly, based on highest peak-hour demand during the two preceding, completed December-March time frames.</p>

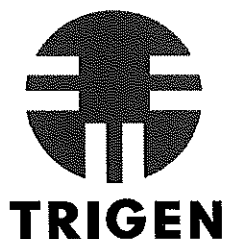
TRIGEN-KANSAS CITY ENERGY CORP.
CASE NO. HR-
SUMMARY COMPARISON OF EXISTING AND PROPOSED RATES

Existing Tariff Rates		Proposed Tariff Rates	
<u>Alternate Heating Source (Small)</u>		<u>Interruptible Heating Service</u>	
Usage Charge (per Mlb)	\$ 3.90	Usage Charge (per Mlb)	\$ 6.52
<u>Annual Capacity Charge (a)</u>		<u>Annual Capacity Charge (c)</u>	
Base plus Mlbs over 750	Base 5,200 plus 7.75	First 3 Mlbs/Hour	n/a
Base plus Mlbs over 1,500	Base 10,638 plus 7.25	Over 3 & Less than 5 Mlbs/Hour	16,200 plus 5,800
Base plus Mlbs over 2,000	Base 13,763 plus 6.25	Over 5 & Less than 8 Mlbs/Hour	25,900 plus 4,850
Base plus Mlbs over 2,500	Base 16,588 plus 5.65	Over 8 & Less than 10 Mlbs/Hour	37,150 plus 3,750
Meter Charge (per meter)	\$ 50	Over 10 & Less than 12 Mlbs/Hour	42,850 plus 2,850
(a) Annual capacity charge rates (750 Mlbs minimum), billed monthly, based on usage during October-March.		Over 12 & Less than 15 Mlbs/Hour	48,250 plus 2,700
		Over 15 Mlbs/Hour	56,050 plus 2,600
<u>Alternate Heating Source (Large)</u>		<u>Meter Charge (monthly)</u>	
Usage Charge (per Mlb)	\$ 3.90	First Meter	\$ 100
<u>Annual Capacity Charge (b)</u>		Each Additional Meter	\$ 50
Base plus 100 lb/hr over 3 Mlb/hr	Base 16,200 plus 580		
Base plus 100 lb/hr over 5 Mlb/hr	Base 25,900 plus 485		
Base plus 100 lb/hr over 8 Mlb/hr	Base 37,150 plus 375		
Base plus 100 lb/hr over 10 Mlb/hr	Base 42,850 plus 285		
Base plus 100 lb/hr over 12 Mlb/hr	Base 48,250 plus 270		
Base plus 100 lb/hr over 15 Mlb/hr	Base 56,050 plus 260		
Meter Charge (per meter)	\$ 100		
(b) Annual capacity charge rates (3,000 lbs/hour minimum), billed monthly, based on peak-hour use during October-March.		(c) Annual capacity charge rates, billed monthly, based on peak-hour use during immediately preceding, completed December-March, heating period.	

TRIGEN-KANSAS CITY ENERGY CORP.
CASE NO. HR-2008-_____
NAMES OF COUNTIES AND COMMUNITIES AFFECTED

JACKSON COUNTY, MISSOURI

CITY OF KANSAS CITY, MISSOURI



Press Release

Trigen-Kansas City Energy Corporation files for new rates

Kansas City, MO – March 11, 2008 – Trigen-Kansas City Energy Corporation (Trigen-KC) announced today that it has filed a request with the Missouri Public Service Commission (MPSC) for the first change in rates for its Missouri customers since 1990. The Company is requesting \$1,228,000 in rate relief.

If the request is approved, the average increase for current standard tariff customers would be roughly 17.5%. Customers currently receiving service under the Alternative Heating Source or Vacant Building Rider tariffs will experience a higher increase of approximately 35.4%, as these customers' rates are more closely correlated to fuel prices, and these costs in particular have increased significantly since Trigen-KC began providing steam service eighteen years ago.

Trigen-KC has initiated the rate change proceeding because of increasing investment in its plant and system, fuel prices, and other input costs. As an example, Trigen-KC's fuel costs have increased more than 100% over January 2000 levels. In making the announcement, Brian Kirk, Vice President and General Manager of Trigen-KC, stated, "Due to rising costs over a period of many years, we are seeking our first rate increase since Trigen-KC began serving downtown Kansas City eighteen years ago. Since 1990, overall utility costs have increased nationally anywhere from 30% to more than 300%, depending upon the commodity or service provided. Generally speaking, consumer prices for all items have increased by more than 60% over the same period. In spite of this, I am pleased that we have been able to shield our customers from cost increases for such a long period of time, and that in finally proposing to raise rates we have sought to minimize the impact on our customers. Still, the time has nonetheless come for Trigen-KC to request a rate change."

After the filing with the MPSC, an audit of Trigen-KC's operations will be conducted, and a hearing before the MPSC will be held. Any new rates approved as a result of this request will most likely become effective no later than early 2009.

Trigen-KC provides steam service to 56 customers in Kansas City through its 6.5-mile steam distribution system. The Company is a subsidiary of Thermal North America, Inc., (a Veolia Energy company) which owns the largest portfolio of district energy systems in the United States of America.

Contact: Rowan Sanders - Tel (617) 849-6656

Summary Explanation of Why Rate Relief is Needed

Rate Relief is needed due to the following:

- The investment in net plant, the cost of fuel and other consumables and operations and maintenance expenses have increased substantially in the eighteen years since the last rate adjustment.
- Depreciation rates have not been revised in approximately two decades, during which time many changes have occurred to the plant and distribution system.
- Improvements in metering technology and a changed business environment will enable Trigen to implement more appropriate billing determinants and rate structures.

TRIGEN-KANSAS CITY ENERGY CORP.
CASE NO. HR-2008-_____
SUMMARY OF PROPOSED CHANGES TO GENERAL RULES & REGULATIONS

Sheet	Rule	Category	Description of Change
5	1.5	1	clarifies that additional types of Company equipment are excluded from "Customer Installation"
5	1.9	1	clarifies that "Point of Delivery" can vary due to factual circumstances
8	2.4	1	corrects mistaken definition title
9	2.7	3	changes fixed rate to variable rate of interest on security deposits
9	2.7	1	corrects citation to regulations
11	3.3	1	clarifies definition of "indebtedness"
12	3.6	1	clarifies scope of equipment that Company may need to install on Customer property
12	3.7	1	broadens scope of equipment that Company is responsible for installing and maintaining
12	3.8	2	updates Company's service obligation to account for new IHS tariff
12	3.9	2	updates Company's service suspension rights to account for new IHS tariff
15	4.1	1	section clarified by incorporating previously defined term.
15	4.2	2	allows alternative Customer sources of steam to account for new IHS tariff
17	4.8	1	clarifies title to section
19	4.11	3	allows Company discretion to forego imposition of additional security deposits
19	4.13	1	capitalize defined term: Point of Delivery
21	5.4	1	capitalize defined term: Point of Delivery
21	6.1	1	clarifies which expenses Customer shall not be responsible for
22	6.5	1	correct typographical error by removing word "the"
23	6.6	2	change to account for new demand meters and new tariff
25	7.2	1	wording change to clarify original intent
27	8.2.3	1	correct citation to statute
29	Art. 10	3	provides flexibility to Company to modify form of agreement where necessary
29	Heading	1	first two digits of year of agreement changed from "19__" to "20__"
30	Sec. 3	3	provides Customer with right to early termination upon payment of termination fee
30	Sec. 3	1	first two digits of year of agreement changed from "19__" to "20__"
31	Signature	1	correction to company name in signature block

Category Codes

- 1 clarifications
- 2 updates to conform with changes in rates
- 3 material changes