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Witness: Steven C. Carver

Type of Exhibit: Direct Testimony

Sponsoring Party: Trigen-Kansas City

Case No. HR-2008-\_\_\_\_

Date Testimony Prepared: February 29, 2008

# BEFORE THE PUBLIC SERVICE COMMISSION STATE OF MISSOURI

DIRECT TESTIMONY

**OF** 

STEVEN C. CARVER

TRIGEN-KANSAS CITY ENERGY CORP.

<u>NP</u>

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Schedule SCC-1	Summary of Qualifications
Schedule SCC-2	Summary of Previously Filed Testimony
Schedule SCC-3	Trigen Joint Accounting Schedules

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI DIRECT TESTIMONY OF STEVEN C. CARVER 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 Steven C. Carver. My business address is 740 NW Blue Parkway, Suite 204,
3		Lee's Summit, Missouri 64086.
4		
5	Q.	What is your present occupation?
6	A.	I am a principal in the firm Utilitech, Inc., which specializes in providing consulting
7		services for clients who actively participate in the process surrounding the regulation of
8		public utility companies. Our work includes the review of utility rate applications, as
9		well as the performance of special investigations and analyses related to utility operations
10		and ratemaking issues.
11		
12	Q.	On whose behalf are you appearing in this proceeding?
13	A.	Utilitech was retained by ThermalSource LLC ("ThermalSource") to assist in the
14		preparation of a rate case filing on behalf of Trigen-Kansas City Energy Corp.
15		(hereinafter "Trigen", "Trigen-KC" or "Company") and to file testimony with this
16		Commission regarding Company's overall test year revenue requirement.
17		
18	Q.	Please summarize the purpose and content of your testimony.
19	A.	Generally, my responsibilities in this docket encompass the review and evaluation of
20		various elements of rate base and operating income included within the Company's

overall revenue requirement. As a result, I address various adjustments to rate base and operating income, as identified on the earlier table of contents, as well as introduce the Company's proposed capital structure (Schedule SCC-3.D)<sup>1</sup> sponsored by Trigen witness Stephen G. Hill. Certain ratemaking adjustments may rely on information supplied by, or be co-sponsored in coordination with, Trigen witnesses Brian Kirk, Jason Spreyer and Peter Huck. The revenue requirement effect of the various Company adjustments and recommendations are reflected within the Trigen Joint Accounting Schedules, which are appended hereto as Trigen Schedule SCC-3.

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#### **EDUCATION AND EXPERIENCE**

- 11 Q. What is your educational background?
- 12 A. I graduated from State Fair Community College, where I received an Associate of Arts
- Degree with an emphasis in Accounting. I also graduated from Central Missouri State
- 14 University with a Bachelor of Science Degree in Business Administration, majoring in
- 15 Accounting.

- 17 Q. Please summarize your professional experience in the field of utility regulation.
- 18 A. From 1977 to 1987, I was employed by the Missouri Public Service Commission
- 19 ("MoPSC") in various professional auditing positions associated with the regulation of
- 20 public utilities. In April 1983, I was promoted by the Missouri Commissioners to the

Schedule SCC-3 represents the Trigen Joint Accounting Schedules which support the Company's asserted revenue deficiency. Sub-schedule D is the proposed capital structure sponsored by Mr. Hill. For purposes of presentation, Sub-schedule D may be identified as Schedule SCC-3.D. Any abbreviated reference herein to Schedule D is intended to relate to Schedule SCC-3.D. Similar nomenclature applies to all sub-schedules contained within Schedule SCC-3.

position of Chief Accountant and assumed overall management and policy responsibilities for the Accounting Department. I provided guidance and assistance in the technical development of Staff issues in major rate cases and coordinated the general audit and administrative activities of the Department. In addition to my duties as Chief Accountant, I was also appointed in July 1983 as Project Manager of the Missouri Staff's audit of the construction costs of two nuclear generating stations owned by Missouri utilities.

I commenced employment with the firm in June 1987. During my employment with Utilitech, I have been associated with various regulatory projects on behalf of clients in the States of Arizona, California, Florida, Hawaii, Kansas, Illinois, Iowa, Indiana, Mississippi, Missouri, Nevada, New Mexico, New York, Oklahoma, Pennsylvania, Texas, Utah, Washington, West Virginia and Wyoming. I have conducted revenue requirement analyses and special studies involving various regulated industries (i.e., electric, gas, telephone and water). Since joining the firm, I have occasionally appeared as an expert witness before the MoPSC on behalf of various clients, including the Commission Staff. Additional information regarding my professional experience and qualifications are summarized in Trigen Schedules SCC-1 and SCC-2.

### EXECUTIVE SUMMARY

Q. What is the overall revenue deficiency quantified by Trigen for the Company's regulated operations?

1 A. Based on a historical test year ended December 31, 2006, with known and measurable

2 changes through 2007,<sup>2</sup> the Company has quantified a revenue deficiency of about \$2.6

million.<sup>3</sup> In comparison, Trigen's proposed tariffs represent an overall rate increase of

4 about \$1.2 million as more fully discussed by Company witness Kirk.

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6 Q. In quantifying Trigen's revenue deficiency, has a stringent cut-off date been applied for

7 purposes of recognizing known and measurable changes?

A. In general terms, the September-October 2007 time frame was the objective for

9 recognizing known and measurable changes. For example, major elements of rate base

are extended through October 2007 (e.g., net plant and the deferred income tax reserve

balances). Adjustments related to fuel prices, consumable costs, salaries and wages and

other corporate costs consider quantifiable changes through September-October 2007.

However, as will be subsequently discussed, the Company chose to recognize the pro

forma effects of a new customer (i.e., Truman Medical Center) in quantifying overall

revenue requirement, even though steam service had not yet commenced to that customer

as of late February 2008. This customer addition is accretive to earnings and reduces

overall revenue requirement.

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Q. Could you briefly describe the general nature of the regulated steam service provided by

the Company?

Trigen's approach to the test year and quantification of known and measurable changes will be subsequently discussed herein.

See Trigen Schedule SCC-3.A, as contained in the Trigen Joint Accounting Schedules attached hereto as Trigen Schedule SCC-3.

A. Yes. As will be more fully discussed by Company witness Kirk, Trigen-KC provides regulated steam to commercial customers, including retail business operations, governmental office buildings, hotels and owners/managers of multi-unit residential buildings in the downtown Kansas City area. These customers primarily use steam to heat and humidify occupied building space, to heat domestic water, for laundry use or in food preparation. An affiliate, Trigen-Missouri Energy Corp. ("Trigen-Missouri" or "Trigen-MO") also purchases steam at full tariff rates from Trigen-KC for use in the provision of chilling service in limited areas of the downtown loop. Additionally, although service is not provided at regulated tariff rates, Trigen-KC also sells process steam, pursuant to the terms and conditions of separately negotiated special contracts, to two industrial customers — National Starch and Chemical Company ("Starch") and Cargill, Incorporated ("Cargill").4

- Q. How can the various Company Schedules and Adjustments that you sponsor be identified
   in the Trigen Joint Accounting Schedules?
- 16 A. Trigen Schedule SCC-3 represents the Trigen Joint Accounting Schedules. Within these
  17 joint accounting schedules, the Company's recommended adjustments are listed on the
  18 schedule index located at the front of the joint accounting schedules.

These process steam customers are <u>not</u> captive customers whose only option is to receive utility service without feasible, alternative sources of energy. Rather, these are sophisticated commercial customers who have chosen to purchase steam from Trigen from among several feasible alternatives. Further, these customers have significant year-round steam requirements and voluntarily engaged in extensive arm's-length negotiations before entering into contracts for process steam with the Company.

1	Q.	Mr. Carver, prior to the instant proceeding, have you ever submitted testimony on behalf
2		of a utility in any regulatory proceeding?
3	A.	No. Prior to the current proceeding, all of my testimony has been on behalf of the staff of
4		various public service commissions, consumer advocate groups or state attorneys general,
5		or other parties participating in a formal utility proceeding wherein I typically represent
6		ratepayer interests.
7		
8	Q.	Please describe how the remainder of your testimony is organized.
9	A.	The remainder of my testimony is arranged by topical section, following the table index
10		presented previously. This index identifies the specific areas I address in testimony and
11		references the testimony pages as well as any related adjustment identified in the joint
12		accounting schedules.
13		
14		TEST YEAR
15	Q.	Please briefly describe the test year approach used in this proceeding.
16	A.	In quantifying overall revenue requirement, Trigen has employed a calendar 2006
17		historical test year, <sup>5</sup> recognizing identifiable known and measurable changes generally
18		through September-October 2007, plus the recognition of the TMC extension in 2008.
19		The various ratemaking adjustments proposed by Trigen attempt to balance the various
20		elements of the ratemaking equation and capture material changes in the overall cost of
21		providing utility service occurring in 2007.
22		

<sup>&</sup>lt;sup>5</sup> Company witness Jason Spreyer is sponsoring the unadjusted operating results for the 2006 historical test year.

1	Q.	When you refer to balancing the various elements of the ratemaking equation, is it your
2		intent to imply that each element of the ratemaking equation is developed in an identical
3		manner?
4	A.	No. In the ratemaking process, it is neither possible nor desirable to employ a stringent
5		or mechanical method or approach to quantify each element of the ratemaking equation.
6		Because the overall revenue requirement is comprised of various dissimilar elements, the

technique employed to determine the ongoing level of revenues and expenses must be unique to the facts and circumstances underlying each element. Rather, it was my intent

to indicate that the test year approach should be balanced and consistently applied to the

various ratemaking elements, such that the resulting revenue requirement contains

minimal quantification distortions.

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Q. Why is the selection and balanced adjustment of a test year important in the determination of just and reasonable utility rates?

15 A. The ratemaking equation commonly employed by this Commission, and other regulatory
16 agencies, compares a required return on rate base to the investment return generated by
17 adjusted test year operating results. If the return indicated by the adjusted operating
18 results (i.e., adjusted test year operating income and rate base) is deficient, an increase in
19 revenues is required to provide the utility an opportunity to earn a "reasonable" return on
20 its investment. Conversely, an excessive return would support a reduction in utility

21 revenues and rates.

For the ratemaking equation to function properly, the components comprising the equation (i.e., rate base, revenues, expenses and rate of return) must be reasonably representative of ongoing levels, internally consistent and comparable — within the context of test period parameters. To the extent that these components are not reasonably synchronized, a utility may not have the opportunity to earn its authorized return or, alternatively, may have the opportunity to earn in excess of the return authorized. By synchronizing or maintaining the comparability of revenues, expenses and investment, the integrity of the test year can be maintained with the reasonable expectation that the resulting rates will not significantly misstate the ongoing cost of providing utility service.

Consequently, it is critical that the ratemaking process properly synchronize only those known and measurable changes which occur during the test year or within a reasonable period subsequent thereto, rather than establish utility rates on inappropriate factors or inconsistent post-test year events. In this manner, regulators can best be assured that rates are reasonably based on ongoing cost levels.

- Q. Could you explain the concept of "known and measurable" changes, as the Company has applied that concept in the current filing?
- Yes. In general terms, the recognition of changes or adjustments to test year rate base and operating income should be consistently applied and limited to items that are fixed, known and measurable for ratemaking purposes. In my opinion, the following definition or explanation of the "known and measurable" concept, as commonly applied in utility ratemaking, is consistent with past Commission practice:

1 2 3 4 5 6 7 8 9		<ul> <li>Known and measurable changes – transactions or events that are:</li> <li>(a) Fixed in time. A qualifying transaction or event must be "fixed" within the test year or within the specified period following the test year – for example, during 2007.</li> <li>(b) Known to occur. The transaction or event must be "known" to exist, in contrast with possible, uncertain or speculative changes.</li> <li>(c) Measurable in amount. The financial effect of the transaction or event can be "measured" or accurately quantified.</li> </ul>
10		In this context, a transaction or event should only be considered known and measurable if
11		it has been agreed to by contract or commitment, can be verified to have occurred within
12		the specified time period, and can be quantified employing reliable data.
13		
14		It is not uncommon for regulatory commissions to recognize or annualize transactions
15		occurring within, or subsequent to, the historical test period for verifiable, yet balanced,
16		changes which will impact a utility's future earnings. However, it is also true that parties
17		often differ on whether offsetting factors have been appropriately considered and how far
18		outside the test year it may be appropriate to reach for changes. In my opinion, the
19		recognition of known and measurable changes must be reasonably balanced or matched
20		with offsetting factors. Otherwise, a distorted view of the cost of service will lead to
21		improper rate adjustments. A consistent matching of both price and quantity changes is
22		necessary to achieve this balance, particularly when volume changes, during or
23		subsequent to the test year, offset price level changes.
24		
25	Q.	Based on your regulatory experience, is it reasonable to expect that changes occurring
26		subsequent to a rate case test year will automatically put upward pressure on the cost of

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providing utility service?

No. It may be anticipated that the passage of time may result in increasing expenses (and investments), during periods of even modest inflation. As a result, the recognition of various revenue/expense annualization and/or normalization adjustments might be expected to consistently yield higher revenue requirements. However, revenue trends, productivity gains and reductions in certain operating expenses may offset the presumption of a generally increasing cost of service. Favorable and unfavorable revenue requirement influences can offset one another for many years, explaining how some utilities have been successful in avoiding base rate increases for extended periods of time.

A.

All components of the ratemaking equation change over time. It is only by consistently analyzing the major cost of service components that a determination can be made as to whether the overall revenue requirement has changed materially. The key issue is whether revenues are growing faster or slower than the overall costs necessary to support those revenues.

## REVENUE REQUIREMENT & REVENUE CREDITING

- Referring to Trigen Schedule SCC-3, the change in overall revenue requirement, as set forth on Trigen Schedule A, is shown in two steps "Gross Change In Overall Revenue Requirement" And "Calculated Revenue Deficiency." Could you please explain this presentation?
- 22 A. Yes. As will be discussed by Company witness Kirk, Trigen-KC provides regulated 23 steam service to numerous tariff customers located within the Company's certificated

service territory and provides process steam service to two customers (Starch and Cargill) pursuant to the terms and conditions of negotiated special contracts. Rather than engage in a detailed, complex series of analyses to allocate and apportion joint and common costs between the Company's regulated tariff and process steam customers, Trigen-KC proposes to "revenue credit" the margins associated with its process steam line of business for purposes of this proceeding.

Referring to Trigen Schedule A,<sup>6</sup> the "Gross Change in Overall Revenue Requirement" appearing at line 7 represents the overall revenue deficiency prior to recognizing (i.e., "revenue crediting") the significant margins associated with pro forma process steam sales. In comparison, the "Calculated Revenue Deficiency" appearing at line 8 represents the reduced revenue deficiency <u>after</u> recognizing the pro forma "revenue credit" associated with process steam sales.

- 15 Q. Could you describe the "revenue crediting" process?
- 16 A. Yes. There are two basic methods for apportioning joint and common costs between
  17 tariff and nontariff services. First, complex and detailed cost studies and analyses can be
  18 undertaken to assign and allocate revenues, expenses and investment between these lines
  19 of business. The result of such detailed studies is that each line of business would be
  20 treated as a stand-alone operation for regulatory purposes and would assume
  21 responsibility for their respective costs, whether directly assigned or allocated.

See Trigen Schedule A is contained in the Trigen Joint Accounting Schedules attached hereto and may also be identified as Trigen Schedule SCC-3.A.

In lieu of undertaking such time consuming and expensive cost studies, the margins from profitable nontariffed (or nonregulated) lines of business can be recognized in quantifying overall revenue requirement for purposes of setting regulated tariff rates. Such an approach can be implemented by either recognizing such lines of business (i.e., investment, revenues and expenses) above-the-line for ratemaking purposes or by removing the identifiable revenues, expenses and investment and then separately quantifying a "revenue credit" adjustment to the overall revenue deficiency calculation. Trigen-KC employed the second approach in order to demonstrate the significant contribution of the process steam line of business in reducing overall revenue requirement.

This preferred approach effectively allows the Company to retain a return on its process steam investment equivalent to the weighted cost of capital considered in setting utility rates, with the excess margins used to mitigate or reduce overall revenue requirement.

steam investment equivalent to the weighted cost of capital considered in setting utility rates, with the excess margins used to mitigate or reduce overall revenue requirement. The Company's proposed treatment of these nontariffed services decreases revenue requirement by over \$2 million, based on Trigen-KC's proposed capital structure and cost rates.

- Q. Would it be possible to achieve a comparable result by simply including the process
   steam services above-the-line for ratemaking purposes?
- 21 A. Yes. The revenue requirement impact of these two alternatives should produce 22 comparable results. However, the revenue requirement impact of the process steam 23 services would not be readily identifiable under such an approach.

1 Q. By proposing to revenue credit the margins from its process steam line of business, is the

Company necessarily committing to utilize this methodology in all future rate case

3 proceedings?

4 A. No. The Company has proposed the revenue crediting approach in this proceeding for

5 several reasons. First, Trigen-KC has never processed a steam rate case since Kansas

City Power & Light Company divested its steam property in the early 1990's. Second,

the assembly of this rate case filing was a major undertaking for the Company at a time

when significant developments in downtown Kansas City demanded attention. Third, the

revenue crediting methodology mitigates a significant portion of the overall revenue

requirement without the need to commit significant resources to conduct detailed cost

assignment and allocation studies and analyses. Nevertheless, the Company may choose

to use this same methodology in future rate proceedings.

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#### RATEMAKING ADJUSTMENTS

- 15 Q. Are you sponsoring adjustments to both rate base and operating income for purposes of quantifying overall revenue requirement?
- 17 A. Yes. I am sponsoring various adjustments to Trigen-Kansas City's test year rate base and operating income.

- 20 Q. Could you identify and briefly describe the rate base adjustments you sponsor?
- 21 A. Yes. The following outline identifies and briefly describes each rate base adjustment:<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> These rate base adjustments are listed on Trigen Schedule SCC-3.B, page 2.

1		B-1 Net Plant Update: Recognizes the balance of gross plant in service and the
2		accumulated depreciation reserve as of October 2007.
3		B-2 Remove Process Steam: Removes from rate base the direct net investment and
4		deferred income tax reserve balance related to providing process steam service.
5		B-3 Truman Medical Center: Recognizes pro forma rate base items for expanding the
6		Company's certificated service territory to include Truman Medical Center.
7		B-4 Materials and Supplies & Trigen-Missouri: Recognizes a thirteen-month average
8		of materials and supplies inventory in rate base and removes certain inventory
9		transactions relating to Trigen-Missouri that had been inadvertently recorded on Trigen-
10		Kansas City's balance sheet during the historic test year.
11		B-5 Fuel Inventory: Includes a thirteen-month test year average of fuel inventories
12		recorded by Trigen-Kansas City.
13		<b>B-6 Prepayments:</b> Removes all prepayments from rate base, as the recorded balance
14		was primarily attributable to the Waste Coal facility <sup>8</sup> and work performed by Johnson
15		Controls on the Cargill process steam project.
16		B-8 Update Customer Deposits & ADIT Reserve: Recognizes the balance of
17		customer deposits and the accumulated deferred income tax reserve as of October 2007.
18		
19	Q.	Could you identify and briefly describe the adjustments to operating income that you
20		sponsor?
21	A,	Yes. The following outline identifies and describes each operating income adjustment: <sup>10</sup>

The prepayment was related to a coal purchase agreements between Trigen and Ricci Mining, L.L.C., a coal processing facility in southeast Kansas, which will be briefly discussed in a subsequent testimony section.

<sup>&</sup>lt;sup>9</sup> Adjustment "B-7" was intentionally left blank.

1	C-1 Revenue - Billed Basis Adjustment: Adjusts test year tariff revenues from an
2	accrual to a billed basis.
3	C-2 Revenues - Customer Additions, Losses & Corrections: Adjusts test year
4	revenues to recognize known customer changes and corrections, other than Truman
5	Medical Center.
6	<u>C-3 Revenues – Weather Normalization</u> : Adjusts test year revenues to reflect 30-year
7	NOAA normal heating and cooling degree days.
8	C-4 Truman Medical Center: Recognizes pro forma operating results associated with
9	expanding the Company's certificated service territory to include the provision of
10	regulated steam service to Truman Medical Center.
11	C-5 Fuel Expense Annualization: Annualizes fuel expense using 2007 coal and gas
12	supply sources/prices, historical generation mix, tariff sales and test year process steam
13	sales.
14	C-7 Pro Forma Purchase Power Expense: 11 Annualizes purchased power expense
15	related to tariff sales, Truman Medical Center addition and test year process steam sales.
16	C-8 Consumables Expense Annualization: Recognizes pro forma consumables
17	expense related to regulated tariff sales and test year process steam sales, using 2007
18	water and sewer rates and other consumables. Consumables associated with extending
19	service to Truman Medical Center are considered in Trigen Adjustment C-4.

These revenue and expense adjustments are listed on Trigen Schedule SCC-3.C, pages 2 through 4.

Adjustment "C-6" was intentionally reserved or left blank.

1	C-9 Remove Process Steam: Removes from operating income the direct revenues and
2	expenses, including fuel, purchased power and consumables expense, related to providing
3	process steam service during the test year.
4	C-10 Income Tax Expense: Recognizes income tax effects associated with pro forma
5	operating results at existing tariff rates.
6	C-11 Depreciation Annualization - Existing Rates: Annualizes book depreciation
7	based on the depreciable original cost investment included in rate base and the book
8	depreciation rates previously authorized by this Commission.
9	C-12 Depreciation Annualization - Proposed Rates: Annualizes book depreciation
10	based on the depreciable original cost investment included in rate base and the proposed
11	book depreciation rates sponsored by Company witness Peter Huck.
12	C-13 Payroll, Benefits & Payroll Tax: Annualizes payroll, employee benefits and
13	related payroll tax expense for the ThermalSource employees working full time at
14	Trigen's Kansas City facility.
15	C-14 Insurance Expense: Annualizes insurance expense based on insurance premium
16	amortization experienced in late 2007, reflecting last known insurance premiums paid.
17	C-15 Real & Personal Property Tax: Annualizes real and personal property tax
18	expense based on 2006 property tax rates and 2007 assessed valuations.
19	C-16 Rate Case Expense: Recognizes a three-year amortization of a reasonably
20	conservative estimate of outside legal and consulting services to assist in preparing,
21	presenting and supporting the current rate filing.

1		C-17 Outside Services & Regulatory Commission Expense: Removes certain test year
2		costs that were non-recurring, related to affiliate operations or associated with efforts to
3		extend the Company's service territory.
4		C-18 Corporate Common Costs: Annualizes and allocates certain indirect costs of the
5		corporate operations of Thermal North America, Inc. ("TNAI") and ThermalSource LLC
6		to Trigen-Kansas City.
7		C-19 JCI Cost Adjustment: Recognizes the contract price change in the JCI "in scope"
8		work effective in January 2007.
9		C-20 Materials and Supplies & Trigen-Missouri: Removes certain test year
10		transactions relating to Trigen-Missouri materials and supplied inadvertently charged to
11		Trigen-KC O&M expense.
12		
13		NET PLANT UPDATE
14	Q.	Please describe Trigen Adjustment B-1.
15	A.	Trigen Adjustment B-1 updates net original cost plant investment to the balances
16		recorded by the Company as of October 31, 2007.
17		
18	Q.	Please explain the reference to net original cost.
19	A.	A utility's investment in property at the time the property is first dedicated to public use
20		is generally identified as the original cost. When the Company first purchased the steam
21		operations from Kansas City Power & Light Company in the early 1990's, Trigen did not
22		maintain its accounting records in conformance with original cost accounting. In 2005,

1 Trigen identified this deficiency and undertook a detailed analysis to correct its 2 accounting records in conformance with original cost accounting. 3 In MoPSC Case No. HM-2004-0618, 12 the Company and Staff entered into a negotiated 4 5 settlement agreement that, in part, required Trigen-KC to maintain its accounting records 6 in conformance with the FERC uniform system of accounts, including net original cost 7 accounting. This settlement agreement was approved by the Commission by a report and order issued in that docket, effective December 31, 2004.<sup>13</sup> 8 9 10 Does the accumulated depreciation reserve balance included in rate base also reflect the Q. 11 book depreciation rates previously authorized by the Commission, as required by that 12 same settlement agreement? 13 Yes. The depreciation reserve balance has been adjusted by the Company to reflect the A. 14 book depreciation rates authorized by the Commission by Depreciation Authority Order No. 148, issued on June 9, 1983. 15 16 17 PROCESS STEAM You previously described Trigen Adjustments B-2 and C-9 as removing the direct 18 Q. 19 investment, revenues and expenses relating to process steam. Are these adjustments

Case No. HM-2004-0618 involved a joint application of Trigen and TNAI for Commission authority to transfer the control and stock of Trigen-KC.

See Order Approving Unanimous Stipulation And Agreement And Disclaiming Jurisdiction Over The Chilled Water Operations Of Trigen-Missouri Energy Corporation, Case No. HM-2004-0618, effective December 31, 2004.

1		necessary elements of the Company's proposed revenue crediting treatment of the
2		nontariffed process steam margins?
3	A.	Yes. Since the process steam margins are recognized as a reduction in quantifying the
4		calculated revenue deficiency on Trigen Schedule A, it is necessary to remove direct
5		process steam revenues and costs from the determination of test year rate base and
6		operating income. In the absence of such adjustments, revenue requirement would be
7		materially misstated.
8		
9	Q.	When did Cargill first begin receiving steam service from Trigen-KC?
10	A.	Unlike National Starch, whose steam service originated under KCPL ownership, Cargill
11		first began purchasing steam from Trigen-Kansas City in May 2006. Consequently, the
12		2006 test year only includes a partial year of process steam sales to Cargill.
13		
14	Q.	Does Trigen Adjustment C-9 remove only the actual steam sales and related costs for the
15		partial year of service provided to Cargill during the test year?
16	A.	Yes.
17		
18	Q.	In quantifying the process steam "revenue credit" amount used to determine the
19		"Calculated Revenue Deficiency," did you consider a full year of Cargill process steam
20		sales and related costs?
21	A.	Yes. The revenue credit calculation includes the pro forma impact of a full year of
22		process steam sales and related costs.
23		

### TRUMAN MEDICAL CENTER

- Q. What is the purpose of Trigen Adjustments B-3 and C-4?
- 3 A. These Company adjustments are related to the expansion of Trigen-KC's service territory south of the area commonly referred to as the downtown Kansas City loop. 14 As 4 5 discussed by Company witness Kirk, the construction work on the extension of the steam 6 heating pipeline to serve Truman Medical Center ("TMC") commenced in mid-2007 with 7 completion expected during the first or second quarter of 2008. In Case No. HA-2006-0294, Mr. Kirk sponsored a highly confidential feasibility study 15 and submitted 9 testimony indicating that this expansion and addition of TMC would be accretive to the 10 Company's financial results. The purpose of these two rate case adjustments is to 11 recognize the estimated, pro forma effect of this expansion on both rate base and

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operating income.

- 14 Q. Referring to its order in Case No. HA-2006-0294, the Commission required TMC to
  15 effectively finance the cost of constructing the steam heating pipeline expansion. Given
  16 this requirement, can you explain why there is a pro forma impact on rate base?
- 17 A. Yes. It is true that the Commission's order did adopt a Staff recommendation and required TMC to finance the cost of the construction to ensure that current Trigen customers would "not bear the risk of any adverse effects or losses occasioned by the project. If TMC finances the cost of construction, the risk to current customers is minimized. Further, current customers are protected by Trigen's tariff filings in place at

The Commission approved the extension of the Company's service territory by its Report and Order effective June 1, 2006 in Case No. HA-2006-0294.

See HC Schedule BPK-2 attached to the direct testimony of Mr. Kirk (Trigen Exhibit 1HC), Case No. HA-2006-0294.

the Commission and any adverse effects may be dealt with by the Commission during a ratemaking case." [MoPSC Case No. HA-2006-0294, Report and Order, pp. 6-7]

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In the current rate case, Trigen Adjustment B-3 includes the estimated cost of the pipeline extension in plant in service, which is offset by a customer advance of an equal amount provided by TMC excluding the cost of obtaining regulatory approval of the expansion. Unless and until Trigen-KC refunds a portion of the customer advance to TMC, the Company will not have a "positive" rate base investment in the cost of constructing the extension. However, Trigen-Kansas City will experience a growing negative net plant balance as the accumulated depreciation reserve grows over time. Trigen Adjustment B-3 recognizes the estimated construction cost and the offsetting customer advance in quantifying rate base.

- Q. Please explain your reference to the cost of obtaining regulatory approval of theexpansion.
- During the 2006 test year, Trigen-Kansas City sought and received Commission approval to extend its certificated service territory southward from the downtown Kansas City loop to an area including Truman Medical Center. <sup>17</sup> Certain costs incurred by the Company to successfully expand its service territory were charged to the cost of the extension. Since the cost associated with obtaining regulatory approval of this southward extension

Customer Advances for Construction are recorded in Account 252, pursuant to the FERC Uniform System of Accounts, representing amounts collected from customers that are to be refunded wholly or in part. Once the amounts advanced by the customer are no longer refundable, pursuant to rule or agreement, the remaining balance would only then be considered to represent a contribution in aid of construction, which would be credited to the appropriate plant account.

<sup>&</sup>lt;sup>17</sup> Missouri Public Service Commission, Case No. HA-2006-0294.

provides additional business opportunities for the Company to sell regulated steam service to future customers, these costs were not billable to or recoverable from Truman Medical Center.

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- Q. Referring to Trigen Adjustment C-4, does the Company still anticipate that the TMC expansion will be materially accretive to its earnings on a pro forma basis?
- 7 A. Yes. Although the effect of TMC on Trigen's need for purchased power and opportunity
  8 to sell electricity to KCPL is included in Trigen Adjustment C-7, Trigen Adjustment C-4
  9 does result in a significant gross margin that serves to reduce overall revenue
  10 requirement.

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# MATERIALS AND SUPPLIES & TRIGEN-MISSOURI

- 13 Q. Please identify and briefly describe the proposed adjustment to test year materials and 14 supplies inventory.
- 15 A. In preparing this filing, ThermalSource accounting personnel reviewed the test year 16 Materials and Supplies (M&S) balances recorded on Trigen-Kansas City's balance sheet 17 and determined that such balances inadvertently included certain M&S transactions 18 related to Trigen-Missouri's non-regulated operations. An account analysis was 19 undertaken to determine the portion of the total Trigen-Kansas City M&S test year 20 inventory balances that should have been charged to Trigen-Missouri. 21 Adjustment B-4 calculates the thirteen-month average of Trigen-Kansas City materials 22 and supplies inventory, net of the M&S amounts associated with Trigen-Missouri's 23 operations.

1	Q.	Is there also a related adjustment to test year operating expense that is necessary?
2	A.	Yes. This same analysis of M&S balance sheet inventory activity also revealed a related
3		error concerning a small portion of Trigen-Missouri's materials and supplies inventory
4		issues that had been inadvertently charged to Trigen-Kansas City's operating expense.
5		Trigen Adjustment Schedule C-20 eliminates the cost of the Trigen-Missouri materials
6		and supplies improperly charged to Trigen-Kansas City operating expense during the
7		2006 test year.
8		
9		FUEL INVENTORIES
10	Q.	Please describe how you determined the level of Fuel Inventory included in rate base.
11	A.	Unlike most regulated utilities that burn coal for energy production, Trigen-Kansas City
12		has very limited storage capacity at the Grand Avenue Station. Because of the limited
13		storage space, coal is delivered to Grand Avenue on virtually a daily basis during the
14		peak winter months. As a consequence, the Company is unable to store coal quantities
15		that equate to multiple months of coal burn. Similar to materials and supplies inventory
16		Trigen Adjustment B-5 reflects the Company's proposal to include a thirteen-month
17		average of coal inventory in rate base.
18		
19	Q.	Does Trigen-Kansas City store any oil inventory at Grand Avenue?
20	A.	No. Coal is the only fuel inventory stored at Grand Avenue.
21		
22		<u>PREPAYMENTS</u>
23	Q.	Please describe Trigen Adjustment B-6.

A. During a review of the activity underlying the prepayments recorded on Trigen-Kansas

City's balance sheet, it was determined that virtually all of the recorded monthly balances

were attributable to transactions associated with the Waste Coal facility in southeast

Kansas and payments to Johnson Controls on the Cargill pipeline project. Since these

activities are not related to the Company's ongoing utility operations, Trigen Adjustment

B-6 excludes the entire prepayment balance from rate base.

- Q. Please briefly describe the Waste Coal facility and why the related prepayment balances
   were removed from rate base.
- 10 Trigen-KC originally negotiated and entered into a coal purchase agreement with Ricci A. 11 Mining, L.L.C. – a coal processing facility in southeast Kansas. At the time, it was 12 anticipated that the coal purchase agreement would serve as a reliable source of 13 attractively priced coal for use at the Company's Grand Avenue district energy plant. 14 However, Trigen determined that it was unable to use this coal because the mine had 15 been unable to produce coal at a consistent quality or quantity to meet the Company's 16 coal source requirements. Coupled with its sulfur content, questions remained as to 17 whether Trigen would be able to consistently burn coal from this source under its air 18 emissions permits. As presented by the Company in Case No. HO-2007-0419, Trigen 19 concluded that the coal contract was no longer in the Company's best interests and 20 committed to not seek ratemaking recovery of any investment in the coal purchase

1 The prepayment balances attributable to the waste coal facility were 2 removed from rate base in conformance with the Company's commitment. 3 4 REVENUE ADJUSTMENTS 5 Q. Please describe Trigen Adjustments C-1 and C-2. 6 A. Trigen Adjustment C-1 has the effect of reducing test year revenues to replace the accrual 7 basis revenues recorded in the general ledger with billed basis revenues. 8 Adjustment C-2 reflects a net increase to test year revenues to recognize the addition 9 and/or loss of customers during and subsequent to the test year. While revenues related 10 to the TMC expansion are considered in Trigen Adjustment C-4, Trigen Adjustment C-2 11 recognizes additional revenues associated with the Sprint Center and the addition or loss 12 of other tariff steam customers during or subsequent to the test year. These Company 13 adjustments have a net effect of reducing overall revenue requirement. 14 15 WEATHER NORMALIZATION 16 Q. You previously indicated that Trigen Adjustment C-3 adjusts test year revenues to reflect 17 30-year NOAA normal heating and cooling degree days. Could you briefly describe the 18 methodology employed to quantify the effect of weather variances from normal? 19 Yes. Using billed basis tariff steam sales (i.e., stated in terms of thousand pounds or A.

"Mlbs" of steam), I prepared an eight year (1999 through 2006) regression analysis of

steam sales and heating (or cooling) degree days to quantify the effect of weather

variances on steam sales.

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The Commission issued its <u>Order Closing Case</u> in Case No. HO-2007-0419 on August 9, 2007, and the coal agreements were subsequently assigned by Trigen to Trigen-Missouri on October 10, 2007.

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- Q. Were steam sales to all tariff customers that received service during this eight-year period
   included in the regression analysis?
- A. No. During the regression study period, the Company's tariff customer count dropped from about 68 customers in 1999 to about 57 customers in 2006. However, there has been significant churn in customers such that only 48 of these customers consistently received steam service throughout the eight-year regression period. Consequently, the eight-year regression analysis was limited to the 48 "constant customers" with the regression results applied to all test year customer sales.

10

- 11 Q. What weather station was used for purposes of obtaining actual and normal degree day
  12 data?
- A. Mindful of the Commission Staff's longstanding weather data preference, Trigen's weather regression analysis used actual and normal degree day data from the Kansas City International Airport.

- You previously referred to "cooling" degree days when describing the effect of weather variances on steam sales. Why are "cooling" degree days relevant to Trigen-KC's operations?
- A. For most tariff customers, the Company merely provides steam for any number of uses, including: space heating and humidification, domestic water heating, laundry use, and food preparation. One of Trigen-KC's customers, affiliate Trigen-Missouri, purchases steam at full tariff rates to support its cooling operations in downtown Kansas City.

1		Although Trigen-Missouri does purchase steam throughout the year, the bulk of their			
2		purchases occur during the non-heating season. For that reason, a separate weather			
3		regression analysis was prepared for the steam sales to Trigen-Missouri using actual and			
4		normal "cooling" degree day data.			
5					
6		FUEL EXPENSE			
7	Q.	Please describe Trigen Adjustment C-5.			
8	A.	This adjustment annualizes fuel expense based on historical data: fuel mix (i.e., coal and			
9		gas), unit efficiency, line loss and station use. Trigen Adjustment C-5 annualizes fuel			
10		expense based on late-2007 delivered prices for coal and gas as well as coal handling and			
11		ash disposal.			
12					
13		Trigen Adjustment C-6 has been "reserved" as a placeholder for purposes of potentially			
14		recognizing pro forma fuel expense effects that might arise during the rate case due to			
15		changes in fuel supply sources, revisions in fuel mix for currently unforeseeable changes			
16		in coal utilization, and/or unknown changes in fuel prices that might arise during the			
17		known and measurable period.			
18					
19	Q.	What is the meaning of your statement that Trigen Adjustment C-6 has been "reserved as			
20		a placeholder"?			
21	A.	At the time the Company finalized its direct testimony, there were no known changes to			
22		fuel suppliers, fuel prices or generation mix beyond the factors embedded in the			
23		quantification of Trigen Adjustment C-5. However, recognizing that changes might arise			

1		that could increase or decrease pro forma fuel expense, Trigen Adjustment C-6 was
2		"reserved as a placeholder" to capture such effects when and if they become known and
3		measurable.
4		
5	Q.	In quantifying Trigen Adjustment C-5, were the process steam sales to Starch and Cargill
6		included in or excluded from the determination of system requirements?
7	A.	Except for sales adjustments for weather normalization (tariff customers) and customer
8		adds and losses (tariff customers), Trigen Adjustment C-5 is based on actual 2006 steam
9		sales volumes, including test year sales to Starch and Cargill. However, as previously
10		discussed, Trigen Adjustment C-9 separately removes revenues and expenses, including
11		fuel expense, relating to process steam operations from pro forma operating expense.
12		
13	Q.	Does Trigen consider both Starch and Cargill to represent high load factor customers?
14	A.	Yes. As high load factor customers, Starch and Cargill allow Trigen-Kansas City to more
15		efficiently use coal to meet it steam generation needs, thereby avoiding the purchase of
16		significant volumes of natural gas for boiler fuel.
17		
18	Q.	In quantifying Trigen Adjustment C-9, did Trigen effectively reduce the favorable fuel
19		mix that is achievable only by serving the high load factor process steam customers?
20	A.	No. Trigen did not rely on a fuel dispatch model for purposes of quantifying the amount
21		of pro forma fuel expense included in overall revenue requirement. Although a
22		reasonable case could be presented that the absence of Starch, Cargill and even TMC
23		steam loads could result in a significantly higher proportion of the Company's generation

needs being met by natural gas, Trigen did not recognize this cost penalty to regulated steam operations in preparing Trigen Adjustment C-9.

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### PRO FORMA PURCHASED POWER EXPENSE

5 Q. Please describe Trigen Adjustment C-7.

A. During the 2006 test year, the net purchased power expense incurred by Trigen-Kansas City exceeded ongoing expected levels due to an extended turbine outage at the Grand Avenue Station. Trigen Adjustment C-7 annualizes purchased power expense to reflect more normal net purchases associated with regulated tariff sales, the addition of regulated steam sales to Truman Medical Center and test year process steam sales. This adjustment also recognizes the pro forma effect of the electric tariff rates of Kansas City Power & Light Company ("KCPL") approved by this Commission that became effective in January 2007.<sup>19</sup>

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#### **CONSUMABLES EXPENSE**

- 16 Q. Please describe Trigen Adjustment C-8.
- 17 A. Trigen Adjustment C-8 annualizes consumables expense (i.e., water, sewer and other chemical costs) related to the steam requirements supporting pro forma steam sales to tariff customers and test year process steam sales. This adjustment recognizes the 2007 water and sewer rates implemented by Kansas City, Missouri. Consumables associated with extending service to Truman Medical Center are considered in Trigen Adjustment C-4.

<sup>&</sup>lt;sup>19</sup> Final KCPL rate order issued by the Commission in Case No. ER-2006-0314.

1		INCOME TAX EXPENSE
2	Q.	Please describe Trigen Adjustment C-10.
3	A.	Trigen Adjustment C-10 annualizes test year income tax expense consistent with the
4		various other pro forma revenue and expense adjustments proposed by the Company.
5		
6	Q.	In quantifying taxable income, does Trigen Adjustment C-10 recognize a deduction for
7		interest expense using allocated interest or interest synchronization?
8	A.	Trigen Adjustment C-10 uses the interest synchronization methodology which represents
9		a long-standing practice of this Commission. In essence, the weighted cost of debt
10		included in Trigen-KC's proposed capital structure (Trigen Schedule D) is multiplied
11		times the Company's net investment in rate base (Trigen Schedule B) to determine the
12		amount of interest expense deductible for ratemaking income tax purposes. <sup>20</sup>
13		
14	Q.	If the Commission were to subsequently adopt a weighted cost of debt or rate base
15		different from that proposed by Trigen, would it be necessary to recalculate income tax
16		expense as set forth on Trigen Adjustment C-10?
17	A.	Yes. Except in certain circumstances, income tax expense is a roll-out from the various
18		rate base, revenue and expense adjustments ultimately adopted by the Commission. As
19		in all utility rate cases, income tax expense will need to be recalculated consistent with
20		such findings, including the income tax deduction for interest expense.
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See Trigen Schedules SCC-3.B and SCC-3.D, as contained in the Trigen Joint Accounting Schedules attached hereto as Trigen Schedule SCC-3.

1		<u>DEPRECIATION EXPENSE ANNUALIZATION</u>				
2	Q.	Please describe Trigen Adjustments C-11 and C-12.				
3	A.	Both adjustments represent the annualization of depreciation expense based on the				
4		depreciable plant included in rate base. Trigen Adjustment C-11 applies the book				
5		depreciation rates authorized by the Commission in MoPSC Depreciation Authority				
6		Order No. 148, which prescribed accrual rates for KCPL effective June 1986. Trigen				
7		Adjustment C-12 recognizes the pro forma effect of new depreciation accrual rates, based				
8		on the recommendations of Company witness Peter Huck. Collectively, these				
9		adjustments represent the incremental change to the level of book depreciation expense				
10		included in the 2006 test year.				
11						
12	Q.	2. How were Trigen Adjustments C-11 and C-12 quantified?				
13	A.	Book depreciation was annualized by multiplying the regulated investment in depreciable				
14		plant included in rate base as of October 31, 2007, by the accrual rates discussed				
15		previously. With regard to Trigen Adjustment C-11, the aggregate amount of the pro				

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In contrast, Trigen Adjustment C-12 compares the pro forma depreciation resulting from the Company's proposed depreciation rates with the annualized level developed in quantifying Trigen Adjustment C-11, yielding the incremental change in deprecation expense associated with the proposed change in book depreciation rates.

forma depreciation was then compared to the amount of depreciation expense recorded

during the 2006 test year to quantify the adjustment amount.

# PAYROLL, EMPLOYEE BENEFITS & PAYROLL TAX EXPENSE

- 2 Q. Please describe Trigen Adjustment C-13.
- 3 A. Trigen Adjustment C-13 annualizes payroll, employee benefits and related payroll tax
- 4 expense for the four (4) ThermalSource<sup>21</sup> employees who worked full time during 2007
- on behalf of Trigen's operations in Kansas City, Missouri. Most of the labor resources to
- 6 operate and maintain the Kansas City facility during the 2006 test year were provided by
- Johnson Controls, Inc. as an outside contractor pursuant to a fixed charge arrangement.
- 8 Accordingly, Trigen Adjustment C-13 only annualizes payroll and benefits for those
- 9 ThermalSource administrative employees working exclusively at the Kansas City facility.

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- 11 Q. Please explain how Trigen Adjustment C-13 was calculated.
- 12 A. First, regular wages were recognized in amounts equal to the annual base pay for each
- full-time employee in mid-2007. The duties and responsibilities of the four full time
- 14 ThermalSource administrative employees, located in Kansas City, encompass both
- Trigen-Kansas City and unregulated affiliate Trigen-Missouri. These Kansas City-based
- ThermalSource employees maintain positive time sheet reporting wherein all work hours
- are directly assigned to Trigen-Kansas City or Trigen-Missouri operations. When
- 18 calculating the payroll annualization, each ThermalSource employee's annual salary was
- 19 apportioned between Trigen-Kansas City and Trigen-Missouri operations using time
- distributions during the 2006 historic test year.

ThermalSource, LLC is a wholly owned subsidiary of TNAI and an affiliate of Trigen-Kansas City.

ThermalSource employs many of the management and administrative personnel of the company. The direct testimonies of Company witnesses Abbott and Spreyer provide a corporate structure and support services overview.

Second, the annualization calculation of employee benefits were only undertaken for
those benefits directly related to wages paid. Specifically, the Company maintains a
Defined Contribution Plan wherein contributions are made to a retirement trust that is
equivalent to five percent (5.0%) of each employee's regular wages. Accordingly,
Defined Contribution Plan costs were annualized by multiplying each ThermalSource
employee's annual wages by five percent (5.0%).
Similarly, the Company also maintains a 401k Plan wherein it matches a portion of
employee's voluntary contributions to the 401k Trust. During the 2006 historic test year,
the Company's composite "match" contribution was calculated to be 3.26% of all W-2
wages. Accordingly, 401K employee benefits expense was annualized by multiplying
each employee's annual base W-2 wages by 3.26%. The annualized Defined
Contribution Plan expense and 401k expense were allocated to Trigen-Kansas City and
Trigen-Missouri operations in the same proportion as each employee's wages were
assigned to Trigen-Kansas City and Trigen-Missouri.
Finally, payroll tax expense was annualized by applying the 2007 payroll tax rates
(6.20% + 1.45%) and FICA cap (\$97.500) to annualized wages. Like the employee
benefits expense, annualized payroll tax expense was allocated between Trigen-Kansas
City and Trigen-Missouri in the same proportion that payroll costs were directly assigned
to each entity.

# INSURANCE EXPENSE

2 O.	Please	describe	Trigen	Adjustment	C-14

A. Trigen Adjustment C-14 annualizes insurance expense based on actual insurance premium amortizations experienced in the third quarter of 2007, which reflects last known insurance premiums paid. Property and liability insurance is purchased by TNAI on a nation-wide basis and then allocated to the various TNAI properties based on the insurable value of each TNAI property. Overall, the 2007 insurance premium amortization expense decreased materially from that experienced and recorded during the historic test year.

Further, it should be noted that Trigen Adjustment C-14 recognizes a reduction in 2007 premium rates and corrects for the fact that no property or liability insurance was assigned or allocated to Trigen-Missouri in 2006. In other words, the total property and liability insurance TNAI assigned to the Kansas City facilities during 2006 was inadvertently assigned solely to Trigen-Kansas City operations, even though a portion of the insurance coverage was related to and should have been allocated to the operations of Trigen-Missouri. TNAI has corrected this allocation oversight on a prospective basis. Nonetheless, the downward adjustment for insurance expense reflected by Trigen Adjustment C-14 incorporates an allocation of a portion of the 2007 premium amortization expense to Trigen-Missouri.

#### **REAL & PERSONAL PROPERTY TAX**

23 Q. Please describe Trigen Adjustment C-15.

A. Trigen Adjustment C-15 annualizes real and personal property tax expense. More specifically, real and personal property taxes were annualized by applying the composite real and personal property tax rates experienced for the Trigen-Kansas City property in 2006 times the 2007 assessed valuations. The 2007 assessed values were calculated based upon 2007 declarations made by the Company.

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#### RATE CASE EXPENSE

8 Q. Please describe Trigen Adjustment C-16.

Trigen Adjustment C-16 adjusts actual Regulatory Commission Expense recorded during the test year to reflect a three-year amortization of a reasonably conservative estimate of "normal" outside legal and consulting services to assist in preparing, presenting and supporting this rate filing. TNAI currently has only two state-regulated steam properties nationwide, with Trigen-Kansas City being the only state-regulated property in Missouri. As such, neither TNAI nor ThermalSource currently maintain permanent staff to prepare and present a formal rate case without outside assistance.

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- 17 Q. How did the Company determine a "reasonably conservative" estimate of outside legal 18 and consulting services to be incurred?
- A. At the outset, it should be emphasized that the current rate filing is not considered to be a

  "normal" or "typical" rate case particularly, for Trigen-Kansas City. This is the first

  steam heat rate case that has been filed for this property since the late 1980's, before

  Kansas City Power & Light Company divested its steam heat operations in 1990.

Trigen-St. Louis Energy Corp., a wholly-owned subsidiary of TNAI, is rate regulated by the Solid Waste Management District Commission, a municipal entity in St. Louis, MO.

#### Direct Testimony: Steven C. Carver

Further, because accounting records were not properly kept – at least from a regulatory perspective – under Trigen-Kansas City's previous ownership group, more significant resources have been required to prepare this case than would have been necessary had regulatory accounting records been properly maintained. These two factors have caused Trigen-Kansas City to incur higher outside services expense than what is being sought for recovery in rates.

Regarding the question of exactly how a "reasonably conservative" estimate was derived, clearly professional judgment was required inasmuch as Trigen-Kansas City has no recent "actual" or "normal" experience to rely upon.

A.

- Q. Trigen Adjustment C-16 reflects a significant downward adjustment to test year actual operating expense. Please explain why this pro forma adjustment is so significant in amount.
  - Trigen-Kansas City, ThermalSource and TNAI incurred outside services expense related to the preparation of this rate case throughout much of the 2006 test year. For various reasons, this rate case was postponed on several occasions during that period. Additional outside services were required as the Company's awareness of and reaction to the requirements of a rate case filing evolved over time. Outside services costs incurred during 2006 to prepare this rate case were not deferred, unlike other regulated Missouri utilities, but were instead charged directly to operating expense.<sup>23</sup> Thus, Trigen Adjustment C-16 has the impact of eliminating the actual outside services expense

The cost of outside services associated with the rate case were charged to Account 923, Outside Services Expense, or Account 928, Regulatory Commission Expense.

1		incurred in 2006 while reflecting a much lower three-year amortization of an estimated
2		"normal" level of rate case expense.
3		
4		OUTSIDE SERVICES & REGULATORY COMMISSION EXPENSE
5	Q.	Please describe Trigen Adjustment C-17.
6	A.	Trigen Adjustment C-17 removes certain test year costs charged to Trigen-Kansas City
7		operating expense that are either: 1) non-recurring in nature; 2) related to other TNAI
8		properties inadvertently charged to Trigen-Kansas City operating expense; 3) incurred in
9		the effort to expand the Company's service territory; or 4) associated with obtaining
10		rights and/or easements to construct the line extension to serve Truman Medical Center.
11		The latter two categories of costs are properly capitalized as costs associated with the
12		TMC project.
13		
14	Q.	How were the various subparts of Trigen Adjustment C-17 developed?
15	A.	A detailed analysis of Account 923, Outside Services, and Account 928, Regulatory
16		Commission Expense, was undertaken, which lead to the identification of certain charges
17		relating to the four categories of costs noted previously. This analysis also identified the
18		amount of "rate case" expense recorded during the test year that was employed in
19		quantifying Trigen Adjustment C-16, as discussed in that section of this testimony.
20		
21		CORPORATE COMMON COST ALLOCATION
22	Q.	Are most of the administrative and ownership functions related to the operations of
23		Trigen-Kansas City undertaken by personnel located in Kansas City?

A. No. As discussed by Company witness Spreyer, the day-to-day activities of directly operating and maintaining Trigen-Kansas City's steam operations are the responsibility of ThermalSource personnel located in Kansas City. However, most of the administrative and ownership functions for all TNAI properties are currently supported by ThermalSource personnel located in Boston, Massachusetts.

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Q. Has an adjustment been prepared to annualize and normalize the allocation of
 ThermalSource common costs to Trigen-Kansas City?

9 A. Yes. Trigen Adjustment C-18 recognizes a reasonable, ongoing level of ThermalSource common allocable costs.

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12 Q. How was Trigen Adjustment C-18 determined?

Company witness Spreyer provided actual 2007 costs incurred by both TNAI and ThermalSource for the months of January through September. In the normal course of business, certain cost center expenses are retained and not allocated to the various operating entities. In addition, other cost center expense were removed for regulatory purposes and not allocated to Trigen-KC for purposes of this rate case. Using this adjusted data, a 12/9<sup>ths</sup> annualization technique was employed to determine an annual level of common costs. Using the revenue-based allocation factors applied in 2007, the annualized TNAI/ThermalSource costs were then allocated to Trigen-Kansas City and compared to actual test year charges, with Trigen Adjustment C-18 representing the resulting difference.

The types of common costs not allocated to Trigen-KC include: executive officer compensation, incentive or bonus pay, project development and sale/acquisition costs, lobbying and charitable contributions, if any.

#### 1

- 2 Q. Please discuss and describe Trigen Adjustment C-19.
- 3 A. Trigen Adjustment C-19 annualizes the cost of normal and routine operations and maintenance work undertaken for Trigen-Kansas City on a fixed contract basis by 4 5 Johnson Controls, Inc. ("JCI"). Company witnesses Kirk and Abbot discuss the history and status of the business relationship between JCI and Trigen. In general terms, JCI has 6 7 historically provided resources for the normal and routine operations of the plant, 8 commonly referred to as "in scope" work, for a fixed monthly charge. JCI also provided 9 the resources for major maintenance and construction projects during the test year. Trigen Adjustment C-19 simply annualizes the test year costs relating to JCI's routine "in 10 11 scope" work to recognize a contract price change that became effective in January 2007.

JCI COST ADJUSTMENT

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Q. Does JCI continue to provide operations and maintenance service to Trigen-Kansas City?
A. No. The service contract was terminated by mutual agreement of the parties in 2007.
However, because adequate historical information was not available to enable a precise quantification of a pro forma ratemaking adjustment absent the contract, the revenue requirement presentation assumes the continuation of the JCI contract arrangement for purposes of this rate case.

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- 20 Q. Does this conclude your direct testimony?
- 21 A. Yes.

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

In The Matter Of The Tariff I Kansas City Energy Corporat A General Rate Increase For Heating Service Provided To Company's Missouri Service	) ) Case No. HR-2008-		
AFF	IDAVIT OF STEV	'EN C. CARVER	
STATE OF MISSOURI	) ) ss		
COUNTY OF JACKSON	)		

Steven C. Carver, 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 the 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.

Steven C Carver

Subscribed and sworn to before me this 29th day of February, 2008.

DANA MATHEWS
Notary Public - Notary Seal
State of Missouri, Jackson County
Commission # 06943133
My Commission Expires Sep 25, 2010

Notary Public

My commission expires: Sept 25, 2010

### STEVEN C. CARVER SUMMARY OF QUALIFICATIONS

#### **Education and Experience**

I graduated from State Fair Community College where I received an Associate of Arts Degree with an emphasis in Accounting. I also graduated from Central Missouri State University with a Bachelor of Science Degree in Business Administration, majoring in Accounting. Subsequent to the completion of formal education, my entire professional career has been dedicated to public utility investigations, regulatory analysis and consulting.

From 1977 to 1987, I was employed by the Missouri Public Service Commission in various professional auditing positions associated with the regulation of public utilities. In that capacity, I participated in and supervised various accounting compliance and rate case audits (including earnings reviews) of electric, gas and telephone utility companies and was responsible for the submission of expert testimony as a Staff witness.

In October 1979, I was promoted to the position of Accounting Manager of the Kansas City Office of the Commission Staff and assumed supervisory responsibilities for a staff of regulatory auditors, directing numerous rate case audits of large electric, gas and telephone utility companies operating in the State of Missouri. In April 1983, I was promoted by the Commission to the position of Chief Accountant and assumed overall management and policy responsibilities for the Accounting Department, providing guidance and assistance in the technical development of Staff issues in major rate cases and coordinating the general audit and administrative activities of the Department.

During 1986-1987, I was actively involved in a docket established by the Missouri Public Service Commission to investigate the revenue requirement impact of the Tax Reform Act of 1986 on Missouri utilities. In 1986, I prepared the comments of the Missouri Public Service Commission respecting the Proposed Amendment to FAS Statement No. 71 (relating to phase-in plans, plant abandonments, plant cost disallowances, etc.) as well as the Proposed Statement of Financial Accounting Standards for Accounting for Income Taxes. I actively participated in the discussions of a subcommittee responsible for drafting the comments of the National Association of Regulatory Utility Commissioners ("NARUC") on the Proposed Amendment to FAS Statement No. 71 and subsequently appeared before the Financial Accounting Standards Board

with a Missouri Commissioner to present the positions of NARUC and the Missouri Commission.

In July of 1983 and in addition to my duties as Chief Accountant, I was appointed Project Manager of the Commission Staff's construction audits of two nuclear power plants owned by electric utilities regulated by the Missouri Public Service Commission. As Project Manager, I was involved in the staffing and coordination of the construction audits and in the development and preparation of the Staff's audit findings for presentation to the Commission. In this capacity, I coordinated and supervised a matrix organization of Staff accountants, engineers, attorneys and consultants.

Since commencing employment with Utilitech in June 1987, I have conducted revenue requirement and special studies involving various regulated industries (i.e., electric, gas, telephone and water) and have been associated with regulatory projects on behalf of clients in twenty State regulatory jurisdictions.

#### **Previous Expert Testimony**

I have appeared as an expert witness before the Missouri Public Service Commission on behalf of various clients, including the Commission Staff. I have filed testimony before utility regulatory agencies in Arizona, California, Florida, Hawaii, Kansas, Indiana, Nevada, New Mexico, Oklahoma, Pennsylvania, Utah, and Washington. My previous experience involving electric and gas company proceedings includes: Atmos Energy Corp., PSI Energy, Union Electric (now AmerenUE), Kansas City Power & Light, Missouri Public Service/ UtiliCorp United (now Aquila), Public Service Company of Oklahoma, Oklahoma Gas and Electric, Hawaii Electric Light Company, Hawaiian Electric Company, Maui Electric Company, Sierra Pacific Power/ Nevada Power, Gas Service Company, Northern Indiana Public Service Company, Arkla (a Division of NORAM Energy), Oklahoma Natural Gas Company, Missouri Gas Energy, Arizona Public Service Company, and The Gas Company (Hawaii). I have also sponsored testimony in telecommunications and water proceedings in various regulatory jurisdictions.

Schedule SCC-2 summarizes various regulatory proceedings in which I have filed testimony.

Utility	Jurisdiction	Agency	Docket/Case Number	Party Represented	Year	Areas Addressed
Kansas City Power & Light	Missouri	PSC	ER-78-252	Staff	1978	Rate Base, Operating Income
Gas Service Company	Missouri	PSC	GR-79-114	Staff	1979	Rate Base, Operating Income
United Telephone of Missouri	Missouri	PSC	TO-79-227	Staff	1979	Rate Base, Operating Income, Affiliated Interest
Kansas City Power & Light	Missouri	PSC	ER-80-48	Staff	1980	Operating Income, Fuel Cost
Gas Service Company	Missouri	PSC	GR-80-173	Staff	1980	Operating Income
Southwestern Bell Telephone	Missouri	PSC	TR-80-256	Staff	1980	Operating Income
Missouri Public Service	Missouri	PSC	ER-81-85	Staff	1981	Operating Income
Missouri Public Service	Missouri	PSC	ER-81-154	Staff	1981	Interim Rates
Gas Service Company	Missouri	PSC	GR-81-155	Staff	1981	Operating Income
Gas Service Company	Missouri	PSC	GR-81-257	Staff	1981	Interim Rates
Union Electric Company	Missouri	PSC	ER-82-52	Staff	1982	Operating Income, Fuel Cost
Southwestern Bell Telephone	Missouri	PSC	TR-82-199	Staff	1982	Operating Income
Union Electric Company	Missouri	PSC	ER-83-163	Staff	1983	Rate Base, Plant Cancellation Costs
Gas Service Company	Missouri	PSC	GR-83-207	Staff	1983	Interim Rates
Union Electric Company	Missouri	PSC	ER-84-168/ EO-85-17	Staff	1984 1985	Construction Audit, Operating Income
Kansas City Power & Light	Missouri	PSC	ER-85-128/ EO-85-185	Staff	1983 1985	Construction Audit, Rate Base, Operating Income
St. Joseph Light & Power	Missouri	PSC	EC-88-107	Public Counsel	1987	Rate Base, Operating Income
Northern Indiana Public Service	Indiana	IURC	38380	Consumer Counsel	1988	Operating Income
US West Communications	Arizona	ACC	E-1051-88-146	Staff	1989	Rate Base, Operating Income
Dauphin Consol. Water Supply Co.	Pennsylvania	PUC	R-891259	Staff	1989	Rate Base, Operating Income, Rate Design

Schedule SCC-2 Page 1 of 5

Utility	Jurisdiction	Agency	Docket/Case Number	Party Represented	Year	Areas Addressed
Southwest Gas Corporation	Arizona	ACC	E-1551-89-102 E-1551-89-103	Staff	1989	Rate Base, Operating Income
Southwestern Bell Telephone	Missouri	PSC	TO-89-56	Public Counsel	1989 1990	Intrastate Cost Accounting Manual
Missouri Public Service	Missouri	PSC	ER-90-101	Public Counsel/ Staff	1990	UtiliCorp United Corporate Structure/ Diversification
City Gas Company	Florida	PSC	891175-GU	Public Counsel	1990	Rate Base, Operating Income, Acquisition Adjustment
Capital City Water Company	Missouri	PSC	WR-90-118	Jefferson City	1991	Rehearing - Water Storage Contract
Southwestern Bell Telephone Company	Oklahoma	OCC	PUD-000662	Attorney General	1991	Rate Base, Operating Income
Public Service of New Mexico	New Mexico	PSC	2437	USEA	1992	Franchise Taxes
Citizens Utilities Company	Arizona	ACC	ER-1032-92-073	Staff	1992 1993	Rate Base, Operating Income
Missouri Public Service Company	Missouri	PSC	ER-93-37	Staff	1993	Accounting Authority Order
Public Service Company of Oklahoma	Oklahoma	OCC	PUD-1342	Staff	1993	Rate Base, Operating Income, Acquisition Adjustment
Hawaiian Electric Company	Hawaii	PUC	7700	Consumer Advocate	1993	Rate Base, Operating Income
US West Communications	Washington	WUTC	UT-930074, 0307	Public Counsel/ TRACER	1994	Sharing Plan Modifications
US West Communications	Arizona	ACC	E-1051-93-183	Staff	1994	Rate Base, Operating Income
PSI Energy, Inc.	Indiana	IURC	39584	Consumer Counselor	1994	Operating Income, Capital Structure
Arkla, a Division of NORAM Energy	Oklahoma	OCC	PUD-940000354	Attorney General	1994	Rate Base, Operating Income
Kauai Electric Division of Citizens Utilities Company	Hawaii	PUC	94-0097	Consumer Advocate	1995	Hurricane Iniki Storm Damage Restoration
Oklahoma Natural Gas Company	Oklahoma	OCC	PUD-940000477	Attorney General	1995	Rate Base, Operating Income

Schedule SCC-2 Page 2 of 5

Utility	Jurisdiction	Agency	Docket/Case Number	Party Represented	Year	Areas Addressed
US West Communications	Washington	WUTC	UT-950200	Attorney General/ TRACER	1995	Rate Base, Operating Income
PSI Energy, Inc.	Indiana	IURC	40003	Consumer Counselor	1995	Rate Base, Operating Income
GTE Hawaiian Tel; Kauai Electric - Citizens Utilities Co.; Hawaiian Electric Co.; Hawaii Electric Light Co.; Maui Electric Company	Hawaii	PUC	95-0051	Consumer Advocate	1996	Self-Insured Property Damage Reserve
GTE Hawaiian Telephone Co., Inc.	Hawaii	PUC	94-0298	Consumer Advocate	1996	Rate Base, Operating Income
Oklahoma Gas and Electric Company	Oklahoma	occ	PUD-960000116	Attorney General	1996	Rate Base, Operating Income
Public Service Company	Oklahoma	occ	PUD-0000214	Attorney General	1997	Rate Base, Operating Income
Arizona Telephone Company (TDS)	Arizona	ACC	U-2063-97-329	Staff	1997	Rate Base, Operating Income, Affiliate Transactions
US West Communications	Utah	UPSC	97-049-08	Committee of Consumer Services	1997	Rate Base, Operating Income
Missouri Gas Energy	Missouri	PSC	GR-98-140	Public Counsel	1998	Revenues, Uncollectibles
Sierra Pacific Power Company	Nevada	PUCN	98-4062 98-4063	Utility Consumers Advocate	1999	Sharing Plan
Hawaii Electric Light Co., Power Purchase Agreement (Encogen)	Hawaii	PUC	98-0013	Consumer Advocate	1999	Keahole CT-4/CT-5 AFUDC, Avoided Cost
Kansas City Power & Light Company	Missouri	MoPSC	EC-99-553	GST Steel Company	1999	Complaint Investigation
US West Communications	New Mexico	NM PRC	3008	PRC Staff	2000	Rate Base, Operating Income
Hawaii Electric Light Company	Hawaii	PUC	99-0207	Consumer Advocate	2000	Keahole pre-PSD Common Facilities

Schedule SCC-2 Page 3 of 5

Utility	Jurisdiction	Agency	Docket/Case Number	Party Represented	Year	Areas Addressed
US West/ Qwest Communications	Arizona	ACC	T-1051B-99-105	Staff	2000	Rate Base, Operating Income
The Gas Company	Hawaii	PUC	00-0309	Consumer Advocate	2001	Rate Base, Operating Income, Nonreg Svcs.
Craw-Kan Telephone Cooperative, Inc.	Kansas	KCC	01-CRKT-713- AUD	KCC Staff	2001	Rate Base, Operating Income
Home Telephone Company, Inc.	Kansas	KCC	02-HOMT-209- AUD	KCC Staff	2002	Rate Base, Operating Income
Wilson Telephone Company, Inc.	Kansas	KCC	02-WLST-210- AUD	KCC Staff	2002	Rate Base, Operating Income
SBC Pacific Bell	California	PUC	01-09-001 / 01-09-002	Office of Ratepayer Advocate	2002	New Regulatory Framework / Earnings Sharing Investigation
JBN Telephone Company	Kansas	KCC	02-JBNT-846- AUD	KCC Staff	2002	Rate Base, Operating Income
Kerman Telephone Company	California	PUC	02-01-004	Office of Ratepayer Advocate	2002	General Rate Case, Affiliate Lease, Nonregulated Transactions
S&A Telephone Company	Kansas	KCC	03-S&AT-160- AUD	KCC Staff	2003	Rate Base, Operating Income, Nonreg Alloc
PSI Energy, Inc.	Indiana	IURC	42359	Consumer Counselor	2003	Rate Base, Operating Income, Nonreg Alloc
Arizona Public Service Company	Arizona	ACC	E-10345A-03- 0437	ACC Staff	2004	Rate Base, Operating Income
Qwest Corporation	Arizona	ACC	T-01051B-03- 0454 & T- 00000D-00-0672	ACC Staff	2004	Rate Base, Operating Income, Nonreg Alloc
Verizon Northwest Inc.	Washington	WUTC	UT-040788	Attorney General/ AARP/ WeBTEC	2004	Rate Base, Operating Income
Public Service Company	Oklahoma	OCC	PUD-200300076	Attorney General	2005	Operating Income
Hawaiian Electric Company	Hawaii	PUC	04-0113	Consumer Advocate	2005	Rate Base, Operating Income
Citizens Gas & Coke Utility	Indiana	IURC	42767	Consumer Counselor	2005	Operating Income, Benchmarking Study
AmerenUE d/b/a Union Electric Co.	Missouri	MoPSC	ER-2007-0002	State of Missouri	2006	Revenue Requirement
Hawaii Electric Light Company	Hawaii	PUC	05-0315	Consumer Advocate	2007	Rate Base, Operating Income & Keahole Units

Schedule SCC-2 Page 4 of 5

Utility	Jurisdiction	Agency	Docket/Case Number	Party Represented	Year	Areas Addressed
Hawaii Electric Company	Hawaii	PUC	2006-0386	Consumer Advocate	2007	Rate Base, Operating Income
Maui Electric Company	Hawaii	PUC	2006-0387	Consumer Advocate	2007	Rate Base, Operating Income
Trigen-Kansas City Energy Corp.	Missouri	MoPSC	HR-2008	Trigen-KC	2008	Revenue Requirement

# TRIGEN - KANSAS CITY CASE NO. HR-\_\_\_\_\_ INDEX TO ACCOUNTING EXHIBITS AND SUPPORTING SCHEDULES

Schedule SCC-3	Description	Witness
Α	CHANGE IN GROSS REVENUE REQUIREMENT	Carver
<b>A</b> -1	REVENUE CONVERSION FACTOR	Carver
В	SUMMARY OF JURISDICTIONAL RATE BASE	Carver
С	SUMMARY OF OPERATING INCOME	Carver
D	CAPITAL STRUCTURE SUMMARY	Carver/Hill

### TRIGEN - KANSAS CITY

Schedule SCC-3.A Page 1 of 1

## CASE NO. HR-\_\_\_\_\_\_ CHANGE IN GROSS REVENUE REQUIREMENT FOR THE TEST YEAR ENDED DECEMBER 31, 2006

LINE NO.	DESCRIPTION	SCHEDULE REFERENCE	COMPANY PROPOSED
	(A)	(B)	(C)
1	Proposed Rate Base	Sch. SCC-3.B	\$ 8,170,266
2	Rate of Return	Sch. SCC-3.D	9.34%
3	Operating Income Required		763,237
4	Net Operating Income Available	Sch. SCC-3.C	(2,169,557)
5	Operating Income Deficiency		2,932,793
6	Revenue Conversion Factor	Sch. SCC-3.A-1	1.6335
7	Gross Change in Overall Revenue Requirement		\$ 4,790,798
8	Calculated Revenue Deficiency		\$ 2,648,258

### TRIGEN - KANSAS CITY CASE NO. HR-\_\_\_\_

Schedule SCC-3.A-1 Page 1 of 1

#### REVENUE CONVERSION FACTOR FOR THE TEST YEAR ENDED DECEMBER 31, 2006

LINE NO.	DESCRIPTION	SCHEDULE REFERENCE	COMPANY PROPOSED
	(A)	(B)	(C)
1	Gross Intrastate Revenue		100.000000%
2	Less: Uncollectible Revenue	(a)	0.000000%
3	Total Revenue	Line 1+ 2	100.000000%
4	Less: Taxes on Local Revenue	(a)	0.000000%
5	Taxable Income	Line 3 + 4	100.000000%
6	Less: Kansas City Earnings Tax		0.00619116
7	Less: Effective State Income Tax		5.200555%
8	Less: Effective Federal Income Tax		32.963115%
9	Net Operating Earnings	Lines 5-6-7-8	61.217214%
10	Revenue Conversion Factor	Line 1/Line 9	1.63353

#### FOOTNOTES:

(a) Placeholder components, not used in pending rate application.

#### TRIGEN - KANSAS CITY CASE NO. HR-\_

Schedule SCC-3.B Page 1 of 2

#### SUMMARY OF JURISDICTIONAL RATE BASE FOR THE TEST YEAR ENDED DECEMBER 31, 2006

LINE NO.	DESCRIPTION	UNADJUSTED TEST YEAR	TEST YEAR ADJUSTMENTS	COMPANY PROPOSED
	(A)	(B)	(C)	(D)
1	Original Cost			
2	Utility Plant In Service	\$50,985,387	\$ (1,168,559)	\$ 49,816,828
3	Depreciation Reserve	(35,626,714)	(840,382)	(36,467,095)
4	Net Plant In Service	15,358,673	(2,008,941)	13,349,732
5	<u>Deductions</u>			
6	Customer Advances for Construction	-	(6,571,000)	(6,571,000)
7	Contributions In Aid of Construction	-	-	-
8	Customer Deposits	(18,200)	18,200	-
9	Deferred Income Tax	(38,568)	8,473	(30,095)
10	Additions			
11	Fuel Inventories	233,579	7,188	240,767
12	Materials and Supplies	1,281,015	(100,153)	1,180,862
13	Prepayments	3,672,993	(3,672,993)	-
14	Total Rate Base	\$ 20,489,492	\$ (12,319,226)	\$ 8,170,266
		(a)	(b)	

#### FOOTNOTES:

(a) Source: Trigen general ledger for year ended 12/31/06.(b) Source: Trigen Schedule SCC-3.B, page 2.

## TRIGEN - KANSAS CITY CASE NO. HR-\_\_\_\_\_\_ SUMMARY OF COMPANY PROPOSED RATE BASE ADJUSTMENTS FOR THE TEST YEAR ENDED DECEMBER 31, 2006

Schedule SCC-3.B Page 2 of 2

		ADJUSTMENT NUMBER / SCHEDULE REFERENCE														
LINE NO.	DESCRIPTION	B-	-1	<u>B-2</u>	_	B-3		B-4		B-5		B-6	 B-7		B-8	TOTAL_
	(A)	(E	3)	(C)		(D)		(E)		(F)		(G)	(H)		(1)	<b>(J</b> )
1	Original Cost															
2	Utility Plant In Service		78,511	\$ (9,184,354)	\$	6,637,284	\$	-	\$	-	\$	-	\$ -	\$	-	\$ (1,168,559)
3	Depreciation Reserve	(1,00	00,794)	160,412		-				-			 			(840,382)
4	Net Plant In Service	37	77,717	(9,023,943)		6,637,284		-				-	-		-	(2,008,941)
5	Deductions															
6	Customer Advances for Construction		-	-		(6,571,000)		_		-		-	_		-	(6,571,000)
7	Contributions In Aid of Construction		-	-		-		-		-		_	-		-	-
8	Customer Deposits		•	-		-		_		-		-	-		18,200	18,200
9	Deferred Income Tax		-	229,238		-		-		-		-	-		(220,764)	8,473
10	Additions															
11	Fuel Inventories		-	-		-		-		7,188		-	_		-	7,188
12	Materials and Supplies		_	-		_		(100,153)		-		_	-		-	(100,153)
13	Prepayments		-	-		-		-		-		(3,672,993)	•		-	(3,672,993)
14	Total Rate Base	\$ 3	77,717	\$ (8,794,705)	\$	66,284	<u>\$</u>	(100,153)	\$	7,188	\$	(3,672,993)	\$ -	<u> </u>	(202,564)	\$ (12,319,226)

#### ADJUSTMENTS:

- **B-1** NET PLANT UPDATE ADJUSTMENT
- **B-2** REMOVE PROCESS STEAM
- B-3 TRUMAN MEDICAL CENTER
- **B-4** MATERIALS AND SUPPLIES & TRIGEN-MISSOURI
- B-5 FUEL INVENTORY
- **B-6** PREPAYMENTS
- B-7 \*\*Reserved\*\*
- **B-8** UPDATE CUSTOMER DEPOSITS & ADIT RESERVE

## TRIGEN - KANSAS CITY CASE NO. HR-\_ SUMMARY OF OPERATING INCOME

Schedule SCC-3.C Page 1 of 4

#### SUMMARY OF OPERATING INCOME FOR THE TEST YEAR ENDED DECEMBER 31, 2006

			TOTAL COMPANY				
LINE			UNADJUSTED	TEST YEAR	COMPANY		
NO.	DESCRIPTION	REFERENCE	TEST YEAR	<b>ADJUSTMENTS</b>	PROPOSED		
	(A)	(B)	(C)	(D)	(E)		
1	REVENUES:						
2	Operating revenues		\$ 11,211,966	\$ (5,005,616)	\$ 6,206,350		
3	Rent from steam property		39,975	Ψ (0,000,010)	39,975		
4	Other Revenues		330,940	3,096	334,037		
5	Total Revenues	(Lines 24)	11,582,882	(5,002,520)	6,580,362		
v	: Otal (for all and	(201100 20)	11,002,002	(0,002,020)	0,000,002		
6	O&M EXPENSES:						
7	Fuel Expense		7,066,304	(2,381,124)	4,685,180		
8	Other Production Expense		3,297,566	(231,272)	3,066,294		
9	Distribution Expense		583,169	13,502	596,671		
10	Customer Serv & Info Expense		17,190		17,190		
11	Administrative & General Expense		1,430,340	(526,268)	904,072		
12	Subtotal	(Lines 711)	12,394,569	(3,125,161)	9,269,408		
13	Depreciation Expense		1,225,912	(675,944)	549,968		
14	<b>Total Operation &amp; Maintenance Expense</b>	(Lines 12+13)	13,620,481	(3,801,105)	9,819,376		
15	Operating Income Before Taxes	(Lines 5-14)	(2,037,599)	(1,201,415)	(3,239,014)		
16	Taxes Other Than Income Tax		104,735	227 065	242 600		
10	Taxes Other Than Income Tax		104,735	237,865	342,600		
17	Income Taxes		(645,115)	(766,943)	(1,412,058)		
18	Net Operating Income	(Lines 15-16-17)	\$ (1,497,218)	\$ (672,338)	\$ (2,169,557)		
	<del>-</del>	,					
			(a)	(p)			

#### **FOOTNOTES:**

(a) Source: Trigen income statement for year ended 12/31/06.

(b) Source: Trigen Schedule SCC-3.C, p. 4.

## TRIGEN - KANSAS CITY CASE NO. HR-\_\_\_\_\_ SUMMARY OF COMPANY PROPOSED NOI ADJUSTMENTS FOR THE TEST YEAR ENDED DECEMBER 31, 2006

Schedule SCC-3.C Page 2 of 4

		ADJUSTMENT NUMBER / SCHEDULE REFERENCE														
NO.	DESCRIPTION		C-1		C-2		C-3	64		C-6		C-6	 C-7	 C-8	C-9	SUBTOTAL
	(A)		(B)		(C)		(D)	(E)		(F)		(G)	(H)	<b>(I)</b>	(J)	(K)
1	REVENUES:															
2	Operating revenues	\$	(118,384)	\$	242,908	\$	188,415	\$ 1,819,200	\$	-	\$	-	\$ (41,313)	\$ _	\$ (7,096,442)	\$ (5,005,616)
3	Rent from steam property		-		_		_	-		-		-	- ·	_	-	-
4	Other Revenues		3,096_				<b>-</b>			-				 		3,096
5	Total Revenues	_	(115,287)		242,908		188,415	1,819,200		-			(41,313)	 	(7,096,442)	(5,002,520)
6	O&M EXPENSES:															
7	Fuel Expense		_		_		_	855,312		55,362		-	(192,646)	_	(3,099,151)	(2,381,124)
8	Other Production Expense		_		_		-	167,141				_	,,.	103,854	(546,398)	(275,403)
9	Distribution Expense		-		-		-	-		-		-	_	-	` ,	-
10	Customer Serv & Info Expense		-		-		_	-		-		_	-	-	-	-
11	Administrative & General Expense		-		-		-	-		_		-	-	-		-
12	Subtotal		-		-		_	1,022,453		55,362		_	 (192,646)	103,854	(3,645,549)	(2,656,527)
13	Depreciation Expense		-				-	118,807	_			<del>-</del>			(164,400)	(45,593)
14	Total Operation & Maintenance Expense		-		-			1,141,260		55,362	_	-	 (192,646)	 103,854	(3,809,949)	(2,702,119)
15	Operating Income Before Taxes		(115,287)		242,908		188,415	677,940		(55,362)		-	151,333	(103,854)	(3,286,493)	(2,300,401)
16	Taxes Other Than Income Tax		-		-		-	-		-			-	-	-	-
17	Income Taxes		-										 	 		<u>-</u>
18	Nat Operating Income	\$	(115,287)	\$	242,908	\$	188,415	\$ 677,940	<u> </u>	(55,362)	<u>s</u>	-	\$ 151,333	\$ (103,854)	\$ (3,286,493)	\$ (2,300,401)

#### ADJUSTMENTS:

- C-1 REVENUES BILLED BASIS ADJUSTMENT
- C-2 REVENUES CUSTOMER ADDITIONS, LOSSES & CORRECTIONS
- C-3 REVENUES WEATHER NORMALIZATION
- C-4 TRUMAN MEDICAL CENTER
- C-5 FUEL EXPENSE ANNUALIZATION

- C-6 \*\* RESERVED \*\*
- C-7 PRO FORMA PURCHASED POWER EXPENSE
- C-8 CONSUMABLES EXPENSE ANNUALIZATION
- C-9 REMOVE PROCESS STEAM

#### 

Schedule SCC-3.C Page 3 of 4

			ADJUSTMENT NUMBER / SCHEDULE REFERENCE								
LINE NO.	DESCRIPTION	PRIOR PAGE SUBTOTAL	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17	SUBTOTAL
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
1	REVENUES:										
2	Operating revenues	\$ (5,005,616)	\$ -	\$ -	\$ -	\$ -	\$ - \$	; -	\$ -	\$ -	\$ (5,005,616)
3	Rent from steam property		-	-	-	-	-	-		-	•
4	Other Revenues	3,096					<del>-</del>		-		3,096
5	Total Revenues	(5,002,520)		-	-	-		-	*	-	(5,002,520)
6	O&M EXPENSES:	·									
7	Fuel Expense	(2,381,124)	-	-	-	-	-	-	_	-	(2,381,124)
8	Other Production Expense	(275,403)	-	-	-	-	-	-	-	-	(275,403)
9	Distribution Expense	-	-	-	-	-	-	-	-	-	-
10	Customer Serv & Info Expense	-	-	-	-	-	-	-	-	-	-
11	Administrative & General Expense	-				25,356	(90,004)		(105,630)	(175,149)	(345,427)
12	Subtotal	(2,656,527)	-	-	-	25,356	(90,004)	-	(105,630)	(175,149)	(3,001,954)
13	Depreciation Expense	(45,593)	_	167,191	(797,542)						(675,944)
14	Total Operation & Maintenance Expense	(2,702,119)	-	167,191	(797,542)	25,356	(90,004)		(105,630)	(175,149)	(3,677,897)
15	Operating Income Before Taxes	(2,300,401)	-	(167,191)	797,542	(25,356)	90,004	-	105,630	175,149	(1,324,623)
16	Taxes Other Than Income Tax	-	-	-	-	(2)	-	237,867	-	-	237,865
17	Income Taxes		(766,943)		-	<u>-</u>					(766,943)
18	Net Operating Income	\$ (2,300,401)	\$ 766,943	\$ (167,191)	\$ 797,542	\$ (25,354)	\$ 90,004 \$	(237,867)	\$ 105,630	\$ 175,149	\$ (795,545)

#### ADJUSTMENTS:

C-10 INCOME TAX EXPENSE - PROFORMA

C-11 DEPRECIATION ANNUALIZATION - EXISTING RATES

C-12 DEPRECIATION ANNUALIZATION - PROPOSED RATES

C-13 PAYROLL BENEFITS & PAYROLL TAX ANNUALIZATION

C-14 INSURANCE EXPENSE ANNUALIZATION

C-15 REAL & PERSONAL PROPERTY TAX ANNUALIZATION

C-16 RATE CASE EXPENSE AMORTIZATION

C-17 OUTSIDE SERVICES & REGULATORY COMMISSION EXPENSE

## TRIGEN - KANSAS CITY CASE NO. HR-\_\_\_\_\_ SUMMARY OF COMPANY PROPOSED NOI ADJUSTMENTS FOR THE TEST YEAR ENDED DECEMBER 31, 2006

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**ADJUSTMENT NUMBER / SCHEDULE REFERENCE** LINE PRIOR PAGE DESCRIPTION SUBTOTAL C-18 C-19 C-20 C-22 C-23 C-24 C-25 TOTAL NQ. C-21 (A) (B) (C) (D) (E) (F) (G) (H) (1) **(J)** (K) **REVENUES:** 2 Operating revenues \$ (5,005,616) \$ (5,005,616) Rent from steam property Other Revenues 3,096 3,096 5 **Total Revenues** (5,002,520) (5,002,520) **O&M EXPENSES:** 6 7 Fuel Expense (2,381,124) (2,381,124) Other Production Expense 65,957 (21,826)(231,272)8 (275,403) Distribution Expense 13,502 13,502 9 Customer Serv & Info Expense 10 Administrative & General Expense (345,427) (526, 268)11 (180,840)12 Subtotal (3,001,954) (180,840) 79,460 (21,826)(3,125,161) 13 Depreciation Expense (675,944) (875,944) 14 **Total Operation & Maintenance Expense** (3,677,897) (180,840) 79,460 (21,826) (3,801,105) Operating Income Before Taxes 15 (1,324,623) 180,840 (79,460)21,826 (1,201,415) 16 Taxes Other Than Income Tax 237,865 237,865 17 (766,943) Income Taxes (766,943) 18 **Net Operating Income** (795,545) \$ 180,840 (79,460) \$ 21,826 (672,338)

#### ADJUSTMENTS:

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C-18	CORPORATE COMMON COST ANNUALIZATION	C-23	**reserved**
C-19	JCI COST ADJUSTMENT	C-24	**reserved**
C-20	MATERIALS AND SUPPLIES & TRIGEN-MISSOURI	C-25	**reserved**

C-21 \*\*reserved\*\*
C-22 \*\*reserved\*\*

Witness: Hill/Carver

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### CAPITAL STRUCTURE SUMMARY FOR THE TEST YEAR ENDED

LINE NO.	DESCRIPTION	CAPITAL COST DESCRIPTION RATIO RATES		WEIGHTED COST	
	(A)	(B)	(C)	(D)	
1	Long-term Debt	64.56%	9.010%	5.82%	
2	Short-term Debt	1.23%	8.430%	0.10%	
3	Common Equity	34.22%	10.000%	3.42%	
4	Total Capitalization	100.00%		9.34%	
		(a)	(a)	(a)	

#### **FOOTNOTES:**

(a) Source: Direct testimony of Stephen G. Hill, Schedule 12.