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Before the Public Service Commission of the State of Missouri

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Rebuttal Testimony

of

H. Edwin Overcast

December 2009

Emplue Exhibit No. 12 Case No(s). 62-2000.0434 Date 1-08-10 Aptr 44

REBUTTAL TESTIMONY OF H. EDWIN OVERCAST ON BEHALF OF THE EMPIRE DISTRICT GAS COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. GR-2009-0434

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. H. Edwin Overcast
- 3 P. O. Box 2947

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- 4 McDonough, GA 30253
- 5 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS CASE?
- 6 A. Yes. I filed direct testimony on behalf of The Empire District Gas Company
- 7 ("EDG" or "the Company").

8 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

- 9 A. My testimony responds to the testimony provided by the Mr. Richard Haubensak on
- 10 behalf of Constellation NewEnergy-Gas Division, LLC ("Constellation") related to
- 11 changes in the transportation tariff provisions.

12 Q. WHAT TESTIMONY HAVE YOU REVIEWED RELATIVE TO

- 13 TRANSPORTATION ISSUES?
- 14 A. I have reviewed both the MPSC Staff report and the testimony of Mr. Haubensak
 15 related to transportation service issues.

16 Q. DOES MR. HAUBENSAK DEFINE TRANSPORTATION SERVICE IN ITS

- 17 MOST NARROW SENSE?
- 18 A. Yes. Mr. Haubensak defines transportation service as simply "an arrangement in
 19 which the customer purchases its own natural gas supply directly from a producer,

1 or through a marketer, rather than receiving sales (or "system supply") service from the utility (local distribution company)."¹ This is a far too narrow view of the 2 3 transportation service provided by a local distribution company ("LDC"). For 4 example, the LDC retains the responsibility for managing and operating the system 5 to assure safe and reliable service to all customers-both transportation and sales. 6 The LDC continues to be the supplier of last resort because it is the LDC's 7 responsibility to balance the system on a daily and hourly basis to assure adequate 8 delivery pressures throughout the system. This includes understanding the physical 9 characteristics of the system and the location of pipeline delivery points from the 10 interstate system. For the Empire system, various components of the system are not 11 interconnected, resulting in unique gas supply pools. The Company not only 12 manages the system as a whole but also manages each supply pool where customers 13 may deliver gas through a city gate for the Company to redeliver gas to customers.

14 Q. PLEASE DESCRIBE HOW EDG OPERATES EACH OF THE THREE

15 SYSTEMS?

A. As part of the prudent operation of the system, the Company operates each of the
three system components in a way that maximizes the use of the available
resources. The following discussion provides a summary of operating procedures
for each system segment:

20 <u>ANR/Northwest</u> - During the summer, the Company purchases gas primarily 21 to fill storage and nominate all gas purchased to two aggregate city gate areas 22 and gas not consumed behind the city gate is "bounced" back to storage.

¹ Direct Testimony of Richard Haubensak, p. 2, l. 13-16

During the winter months, the Company uses no notice storage service to 1 follow load changes except when flowing gas is purchased to meet peak day 2 requirements. Due to the no notice storage service on ANR, EDG does not 3 make any nominations to the city gate during the winter: instead ANR 4 balances the city gate needs using EDG's storage rights. Typically, transport 5 customers never change their nominations to reflect weather changes. This 6 becomes a consideration when daily priced option gas must be purchased to 7 8 meet peak day requirements.

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PEPL/North – There is adequate no notice storage on the Panhandle (North) 9 system to run the system in the winter from storage filled during the summer 10 and then augment the gas supply as needed for peak days with gas priced on a 11 Gas Daily index. In the summer, EDG nominates all gas to the city gate and 12 what is not consumed is "bounced back to storage". During the summer, 13 EDG's sales usage is very small and the industrial transport load is a much 14 larger component of total system usage. Due to the general mismatch of the 15 transport customer nominations versus actual usage, the Company has no way 16 of knowing precisely how much gas the system actually needs that day. 17 During the summer, the system uses the flowing gas (transportation and sales) 18 to match load and the remainder goes into storage. 19

20 <u>Southern Star/South</u> - Unlike ANR and Panhandle, there is not enough storage 21 capacity to run the total system on storage during the winter. Storage only 22 meets approximately 23% of gas demand in the winter and the Company 23 purchases flowing gas for the South system each month. The flowing (non-

1 storage) gas purchased during the winter is nominated to storage and is then 2 directed to the city gates as needed (based on the transportation customers 3 imbalance position) by Southern Star from the Company's no notice storage account. The transport customer imbalances can also create issues with 4 5 EDG's winter regression model. While the regression is used to predict sales, 6 the transport customers' imbalances are an unknown and negate to a certain 7 extent what the regression predicts for sales service usage. Transport 8 customers, large or small, very rarely adjust their nominations based on 9 changes in weather -- they only adjust daily nominations toward the end of 10 the month to lessen the impact of monthly cash out charges. Southern Star's 11 treatment of transportation imbalances is different from Panhandle due to the 12 Predetermined Allocation Agreement ("PDA"). For example, if the transport 13 customers over deliver gas to the extent that the system requirements are also 14 covered by transport gas and there is an absolute excess of gas on the system, 15 the excess gas delivered by the transport customers goes into storage and is 16 not prorated back on the transport customer interstate pipeline contract. 17 Southern Star has storage ratchets that Panhandle and ANR do not have. For 18 example, on Southern Star as the Company's share of storage becomes full the 19 maximum quantity of gas that can be injected into storage on a daily basis is 20 reduced significantly.

Q. HOW DO THE COMPANY'S STORAGE ARRANGMENTS AFFECT THE TRANSPORTATION SERVICE OFFERED BY THE COMPANY?

1 As discussed above, the marginal source of supply comes from the contracted Α. 2 storage services of the Company, all of the time for the North and Northwest 3 portions of the system, and much of the time for the South system. In essence, this 4 means that differences between actual use and volumes nominated by the marketer 5 have an impact on storage. When too much gas is delivered to the system, storage 6 nominations are reduced and system gas remains in storage. When too little gas is 7 delivered to the system relative to load, system gas is withdrawn from storage and 8 delivered to transportation customers. The use of storage occurs regardless of the 9 amount of the aggregate mismatch. In addition to the use of storage, there is also 10 the potential for gas arbitrage when the system must buy additional spot gas at 11 prices exceeding the first of the month price, particularly on high use days. In addition to the daily variability in demand, real time flows on the distribution 12 13 system are highly variable with significant changes being seen on an hourly basis. 14 This is particularly prevalent in the winter. Flows will typically reduce overnight, 15 then increase rapidly during the early morning hours by 50 to 150% or more due to start up of residential furnaces, water heater load, and commercial operations 16 17 starting up for the day. This is commonly referred to as the "morning lift." By 9:00 a.m., the load begins to decrease again. As daytime temperatures increase, the 18 19 afternoon gas demand decreases. Later in the afternoon and into the evening, as 20 residents return home, residential furnace load increases once again, though not as 21 dramatically as the morning peak, until the evening demand drops off once again.

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Q. HOW IS THE VARIABILITY IN DAILY DEMAND MANAGED?

A. All of this variability in demand is managed through the storage services available
 to the Company. These benefits flow to both sales and transport customers.
 However, the transport customers make no contribution to the cost of storage that
 they use each day either by injection or withdrawal.

5 The utility also has the information necessary to identify the optimum mix of 6 pipeline, storage and peaking capacity to meet the design day requirements of the 7 system. In addition to the planning and acquisition of the capacity to serve the 8 design day, the utility must also operate the system to insure that sufficient gas 9 supply is available to the system to meet the daily variations in load across the 10 seasons of the year. The operation of the upstream delivery and storage assets and 11 the peaking supplies must be centralized to insure system reliability at the best cost. 12 In providing transportation service, EDG must perform all of these functions and 13 the transportation service requires the use of storage services but currently does not 14 bear any cost for the services. Under the conditions discussed above, the Company

15 requires information to assess the costs to customers on a cost causation basis.

16 Q. DOES MR. HAUBENSAK CONFUSE THE ISSUE OF STORAGE 17 INJECTIONS AND WITHDRAWALS BASED ON HIS LIMITED VIEW OF 18 TRANSPORTATION?

A. Yes. Mr. Haubensak argues that "Empire itself, by being out of balance between its
nominations and deliveries to its sales customers, can cause injections to or
withdrawals from storage and impose costs on the Company. If, for example, the
imbalances of the other transporters, marketers and individual customers offset the
imbalances of EDG itself, there would be no need to inject or withdraw gas to or

1	from storage." ² As I discussed above, EDG balances the system with injections and
2	withdrawals of no notice storage service. As a practical matter, gas LDCs must
3	operate the system in this manner because the expected system load is not
4	developed from individual customers but based on the total of both sales and
5	transport customers. The mismatch between demand and delivery for transport
6	customers is essentially corrected as part of the normal utility operation. Thus,
7	over-deliveries by transport customers mean less delivery for sales customers and
8	thus lower withdrawals from storage in the winter and more injection into storage in
9	the summer.
10	When the marketers under deliver gas in the winter, EDG assumes that its sales
11	obligation is larger and uses no notice storage or purchases peaking supplies to meet
12	the requirements of the system. In the summer, under deliveries mean that less gas
13	is injected into storage. Forecast error, either positive or negative in total is
14	managed through no notice storage. EDG, in the annual gas supply plan, indicates
15	that "adequate storage is available on the systems to provide the flexibility to adjust
16	to most daily demand deviations from normal." ³ Where customers contract for
17	both gas supply and transportation to the city gate, as in the EDG system, the LDC
18	must match supply and demand on the system. Only EDG has the necessary
19	information to manage the hourly and daily loads of the system.

Q. WHAT OPTIONS DOES THE COMPANY HAVE TO ADDRESS THIS 20 SITUATION? 21

There are multiple options available to the EDG to manage the system as follows: 22 Α.

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² Haubensak, p. 9. l. 22- p.10, l. 4
³ The Empire District Gas Supply Plan Winter 2008/2009, p. 4

1	• Require firm delivery to the city gate through either LDC capacity release
2	with recall rights or non-recallable FT from the market.
3	• Provide firm back-up service for transportation customers through the use of
4	LDC FT.
5	• Require customers whose gas does not reach the city gate to curtail their
6	consumption.
7	As a practical matter, the option of interrupting customers whose gas does not reach
8	the city gate represents a reasonable option only to the extent that transportation
9	service is for the largest customers on the system and the number of such customers
10	is small. Since EDG permits small commercial customers to transport gas on its
11	system, using curtailment to assure reliability is not a reasonable option.
12	Multiple options are available to permit small volume transportation and all require
13	more complex arrangements to maintain a safe and reliable system. For example,
14	one such option is to require the marketer to deliver the average daily volume of gas
15	for the small volume customers each day of the year. The company provides the
16	service associated with injections and withdrawals from storage and peaking
17	services. Under this model, customers are billed for firm service under the
18	applicable rate and the marketer supplied gas becomes a credit to the customers
19	utility gas cost component of the rate. The customer pays the marketer for marketer
20	gas and the benefit or loss to the customer is the difference between the payment for
21	gas to the marketer and the credit from the LDC. Under the EDG model, marketers
22	nominate the quantity of gas that the customer is expected to use on a daily basis.
23	However, for smaller customers there is no data to support the daily nominations

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1		because the only consumption data is monthly. This means that it is impossible for
2		the marketers or the Company to know the daily imbalances of these delivery
3		customers. As a result, the daily cost to serve these transportation customers as it
4		relates to the commodity component of gas costs, storage costs (injections,
5		withdrawals and capacity) and peaking costs are not known with any precision.
6		It is clear that firm customers currently subsidize storage and peaking services since
7		they are included in the PGA costs in total.
8	Q.	DOES THE FACT THAT TRANSPORTATION FOR SMALL VOLUME
9		CUSTOMERS OCCURS WITHOUT TELEMETRY MEAN THAT
10		TELEMETRY IS NOT REQUIRED?
11	A.	No. As discussed above, the system can be operated reliably without telemetry.
12		The current EDG model provides significant subsidies to transportation service at
13		the expense of firm service customers. This subsidy benefits both the marketers,
14		through higher margins, and the customers, through lower costs.
15	Q.	WHAT OPTIONS DOES THE COMPANY HAVE TO ADDRESS THIS
16		CROSS SUBSIDY?
17	A	EDG had multiple options for addressing this cross subsidy. These options include:
18		• Adopting the average day deliveries for small volume customers and
19		revising the current rates completely
20		• Increasing the transportation rates to cover a portion of storage and peaking
21		costs applicable to all customers regardless of their use of the services
22		• Altering the cashout procedures to provide for more complexity to recover
23		additional costs

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Require telemetry to permit accurate costs for each customer. 1 • The least controversial and most cost based option permits the use of telemetry so 2 that the ability to track actual costs is improved. This method complies with the 3 cost causation principle and avoids the potential for overcharging marketers who 4 manage their systems efficiently and effectively. 5 TO CALL AN PERMITTED SHOULD THE COMPANY BE 6 Q. **OPERATIONAL FLOW ORDER ("OFO") DAY EVEN WHEN THERE IS** 7 **NO PIPELINE OFO?** 8 Yes. There are many operational reasons for an OFO for the local system unrelated 9 Α. to pipeline OFO orders. Just as pipelines from time to time face operating

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10 11 constraints, LDCs likewise face constraints from time to time. For example, the 12 LDC could face a constraint in the fall if too much gas is nominated to the system and storages are full so there are no injection rights. This may also occur in the 13 summer when excess gas nominated to the system in low load periods may cause 14 the nominated gas volumes exceed load plus the amount of gas that may be injected 15 into storage. It may also be that in the spring with a cold day and absent full 16 nomination of pipeline capacity, the available storage capacity as the result of 17 storage ratchets may be inadequate to provide reliable service. The ability to 18 declare a system OFO at the discretion of the system operators is essential to safe 19 20 and reliable service. Both demand and supply mismatches created as the result of marketer nominations create the potential for an event that has potential for system 21 operational integrity. So long as EDG notifies transportation customers and 22 marketers in advance, it should be at EDG's discretion when to declare an OFO. 23

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1 Q. DOES THIS COMPLETE YOUR TESTIMONY?

2 A. Yes.

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AFFIDAVIT OF H. EDWIN OVERCAST

STATE OF MISSOURI) **S**S COUNTY OF JASPER)

On the 9th day of December, 2009, before me appeared H. Edwin Overcast, to me personally known, who, being by me first duly sworn, states that he is a Director with the Energy Mangement Solutions of Black & Veatch, and acknowledged that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

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Subscribed and sworn to before me this _9th __ day of December, 2009

Villi L. Klamer - Lipson Notary Public

My commission expires: 10-30-2010

VICKI L, KRAMER-GIBSON Notary Public - Notary Seal STATE OF MISSOURI Jasper County - Comm#66432169 My Commission Expires Oct. 30, 2010