FILED
December 29, 2017
Data Center
Missouri Public
Service Commission

Exhibit No.: 650
Issue: Tariff Revisions; Affiliate Protections
Witness: Gregory M. Lander
Type of Exhibit: Direct Testimony
Sponsoring Party: Environmental Defense Fund
Case Nos.: GR-2017-0215; GR-2017-0216
Date Prepared: September 8, 2017

DIRECT TESTIMONY

OF

GREGORY M. LANDER

On Behalf of the

ENVIRONMENTAL DEFENSE FUND

September 8, 2017

EDF Exhibit No. 650
Date 12-13-17 Reporter Becca
File No. GR-2017-0215; GR-2017-0216

TABLE OF CONTENTS

PURPOSE OF TESTIMONY……………………………………………………………………….3

PROPOSED CHANGES TO THE PGA/ACA CLAUSES………………………………………………………………………….4

RECOMMENDATIONS TO ADDRESS AFFILIATE PIPELINE TRANSPORTATION AGREEMENTS……………………………………………15

CONCLUSIONS AND RECOMMENDATIONS………………………………….24

1 **Direct Testimony of Greg Lander**

2 **Q. Please state your name and business address.**

3 A. My name is Gregory M. Lander. My business address is 83 Pine Street, Suite 101, West
4 Peabody, MA 01960, and my email address is glander@skippingstone.com.

5 **Q. What is your occupation and by whom are you employed?**

6 A. I am President of Skipping Stone, LLC ("Skipping Stone").

7 **Q. Please state your educational background and experience.**

8 A. I graduated from Hampshire College in Amherst, Massachusetts, in 1977, with a Bachelor
9 of Arts degree. In 1981, I began my career in the energy business at Citizens Energy
10 Corporation in Boston, Massachusetts ("Citizens Energy"). I became involved in the
11 natural gas business of Citizens Energy in 1983. Between 1983 and 1989, I served as
12 Manager, Vice President, President and Chairman of Citizens Gas Supply Corporation (a
13 subsidiary of Citizens Energy). I started and ran an energy consulting firm, Landmark
14 Associates, from 1989 to 1993, during which time I consulted on numerous pipeline open
15 access matters, a number of Federal Energy Regulatory Commission ("FERC") Order No.
16 636 rate cases, pipeline certificate cases, fuel supply and gas transportation issues for
17 independent power generation projects, international arbitration cases involving
18 renegotiation of pipeline gas supply contracts, and natural gas market information
19 requirements cases (FERC Order Nos. 587 *et seq.*). In 1993, I founded TransCapacity LP,
20 a software and natural gas information services company. Since 1994, I have also been a
21 Services Segment board member of the Gas Industry Standards Board ("GISB") and its
22 successor organization, the North American Energy Standards Board ("NAESB"). During
23 the period 1994 to 2002, I served as a Chairman of the Business Practices Subcommittee,
24 the Interpretations Committee, the Triage Committee, and several GISB/NAESB Task
25 Forces. I am currently a Board Member of NAESB and have served continuously in that
26 capacity since 1997. Skipping Stone, Inc. acquired TransCapacity in 1999, and since that
27 time I have headed up Skipping Stone's Energy Logistics practice, where my specialization
28 has been interstate pipeline capacity issues, information, research, pricing, acquisition due
29 diligence and planning. In 2001, Skipping Stone launched CapacityCenter.com, a pipeline

1 capacity information service. In 2004, Skipping Stone was acquired by Commerce Energy
2 Group, a national retail energy services provider. In 2005, I was appointed President of
3 Skipping Stone, which operated as a wholly owned subsidiary of Commerce Energy
4 Group. In 2008, I purchased substantially all of the assets of Skipping Stone and now
5 operate essentially the same business as before the Commerce Energy transaction as
6 Skipping Stone, LLC.

7 From 1984 to present, I have maintained a deep familiarity with a wide range of pipeline
8 transportation issues, beginning with access to pipeline capacity to make competitive sales,
9 resolution of the pipeline take-or-pay contracting regime, pipeline affiliate marketer
10 concerns, restructuring of the pipelines from merchants to transporters and thereafter, and
11 definitions of what constituted a pipeline capacity "right" for the purposes of formulating
12 the then newly commenced capacity release and capacity rights trading business process. I
13 continue to be involved in nearly all facets of the capacity information and trading business
14 as part of my duties at Skipping Stone. In addition, I have been the lead principal on all
15 50+ pipeline and storage mergers and acquisitions transactions as well as all pipeline and
16 storage facility expansion projects for which Skipping Stone has been retained by potential
17 purchasers and project sponsors to provide economic due diligence consulting and market
18 analysis.

19 **Q. Have you previously filed testimony before regulatory commissions?**

20 A. I have filed testimony in several proceedings including FERC Docket No. RP04-251-000,
21 which was an El Paso Natural Gas Company ("EPNG") proceeding regarding pathing and
22 segmentation. In FERC Docket No. RP08-426-000, (also an EPNG proceeding), I
23 sponsored answering and supplemental answering testimony. I also filed testimony in
24 FERC Docket No. RP10-1398, the first fully litigated EPNG Rate case in more than three
25 decades. In addition, I have filed testimony in Massachusetts Department of Public Utilities
26 Case Nos. 13-157, 15-34, 15-48, 15-39; Maine Public Utilities Commission Case No.
27 2014-00071; and Virginia Corporation Commission Case No. PUR-2017-00051. Please
28 refer to Schedule EDF-01, which contains a full list of case names and docket numbers.
29 All of the state regulatory cases involved state regulatory determinations with respect to

1 Local Distribution Companies ("LDCs") or electric Load Serving Entities entering into
2 pipeline agreements for new capacity.

3 **Q. On whose behalf are you testifying in this proceeding?**

4 A. I am submitting testimony on behalf of the Environmental Defense Fund.

5 **Purpose of Testimony**

6 **Q. What is the purpose of your testimony?**

7 A. The purpose of my testimony is to recommend changes to Laclede Gas Company's
8 ("Company") Purchased Gas Adjustment ("PGA")/Actual Cost Adjustment ("ACA") tariff
9 provisions, including the Gas Supply Incentive Plan, as well as its Gas Supply and
10 Transportation Standards of Conduct.

11 **Q. Are you attaching any schedules to your testimony?**

12 A. Yes. I am attaching the following schedules to my testimony:

13 - Schedule EDF-01: List of Expert Testimony and Resume
14 - Schedule EDF-02: Concentric Energy Advisors Report: "Benefits of Spire STL
15 Pipeline to Laclede Gas Company Customers"
16 - Schedule EDF-03: Proposed Modifications to PGA/ACA Tariff
17 - Schedule EDF-04: Proposed Modifications to Gas Supply Incentive Plan
18 - Schedule EDF-05: Laclede's Cost Allocation Manual and Gas Supply and
19 Transportation Standards of Conduct
20 - Schedule EDF-06: Proposed Modifications to the Gas Supply and Transportation
21 Standards of Conduct
22 - Schedule EDF-07: Spire STL Pipeline Open Season Announcement
23 - Schedule EDF-08: Company's Response to EDF-006 Data Request
24 - Schedule EDF-09: Credit Suisse: "AGA Conference Takeaways"

25 **Q. Please provide a summary of your testimony and recommendations.**

26 A. My testimony proposes changes to the process of reviewing and setting rates to recover
27 the reasonable costs of gas (including gas transportation) through the ACA and PGA
28 clauses (defined below) to reflect recent trends in the natural gas market and to protect

1 ratepayers from any unreasonable costs associated with affiliated pipeline transportation
2 agreements. I also propose that the requirements in the Company's Cost Allocation Manual
3 and Gas Supply and Transportation Standards of Conduct apply specifically to affiliate
4 pipeline transportation agreements. I testify to how the Company's proposed changes to its
5 Gas Supply Incentive Plan ("GSIP") also interact with my proposed changes. To
6 demonstrate the pertinence of my recommended changes, I provide illustrative
7 hypotheticals to explain how ratepayers will be protected under my proposals.

8 **Proposed Changes to the PGA/ACA Clauses**

9 **Q. What are the ACA and PGA?**

10 A. The ACA is the acronym for Actual Cost Adjustment. The ACA is a process that
11 establishes an annual cost of gas amount per therm that will be charged to customers on a
12 going forward basis each year. In addition, as set forth in the Company's Tariff at Sheet
13 28-b.3 Section D 7:

14 "The Company shall also provide with its annual ACA filing a reliability report
15 explaining, in reasonable detail, why its gas supplies and transportation services are
16 appropriate to meet anticipated requirements of its firm service customers."

17 Then, as many as four times per year, the Company may further adjust the amount per
18 therm determined through the ACA process to be chargeable to the Company's various
19 customers with the Purchased Gas Adjustment or "PGA" process. The PGA is the
20 mechanism by which financial gains and losses, versus the annual cost per therm
21 established by means of the ACA process, flow through to ratepayers.

22 **Q. Please provide an overview of your understanding of the Company's proposed**
23 **changes to its PGA/ACA clauses.**

24 A. As explained by Laclede witness Weitzel, the Company is proposing to make the
25 PGA/ACA clauses of its two operating companies more consistent with the possibility of
26 combining these two cost structures at some point in the future. Laclede proposes changes
27 to the technical features of both clauses, in addition to changes to the GSIP and the
28 mechanism for off-system sales and capacity releases. Weitzel Testimony at page 24, lines
29 9-14. The Company has also acknowledged the need to address additional changes to the

PGA/ACA in a careful and comprehensive manner, in collaboration with the parties to this proceeding. Weitzel Testimony at page 32, lines 7-10.

Q. Do you support the Company's proposed changes to its PGA/ACA clauses?

A. While I do not take a position on the Company's proposed changes at this time, I do recommend other changes to the PGA/ACA clauses that should be incorporated and are necessary to create a reasonable result. Those changes are reflected in Schedule EDF-03.

Q. Can you provide a brief overview of your proposed changes to the PGA/ACA clause?

A. In short, I propose that the Missouri Public Service Commission ("Commission") incorporate the following ranking process into the PGA/ACA:

1. Group the Company's capacity into a supply reliability capacity bucket and supply diversity capacity bucket;
2. Analyze the Company's portfolio, ranking each component by its all-in cost (i.e., the sum of all fixed and variable charges, including the gas commodity, associated with each asset or contract divided by the units of throughput or utilization of the asset or contract);
3. If a new contract is introduced into the ranking process (e.g., to replace the Company's propane-air capacity), identify the full cost of the propane-air capacity plus the cost of propane and divide that by the total quantity of design-winter usage (therms) and arrive at an all-in cost (per therm) for that means of meeting peak demand;
4. Then compare that all-in cost (per therm) with the all-in cost of using that portion of the new contracted capacity plus the cost of gas divided by the same usage (therms) and arrive at a comparable all-in cost; and
5. Permit recovery of the lesser of the equivalent all-in cost times design-winter usage of the propane capacity or the all-in cost of the new replacement capacity times the same usage.

My testimony below explains each of these steps in further detail.

Q. Why are your proposed changes necessary?

A. The PGA allows for the flow through of costs of gas (including transportation), subject to the requirements in the Company's tariff and applicable prudence reviews conducted by the Commission. I propose changes to assist in reviewing the reasonableness of the costs ratepayers are asked to bear and how those costs are evolving over time given changes in the natural gas market. My proposed changes will also protect ratepayers by ensuring that

1 ratepayers are indifferent to capacity or supply decisions (approved at the corporate level),
2 by shielding them from any unreasonable costs, particularly those which may result from
3 an agreement with an affiliate.

4 **Q. Do any of your proposed changes impact the Commission's ability to review the**
5 **Company's decisions for prudence?**

6 A. While the Commission's statutory authority to review reasonableness of decisions and
7 resulting costs is not impacted, the proposed changes should assist the Commission and the
8 parties involved in future cost review proceedings.

9 **Q. To provide context for your proposals, can you give us an understanding of how we**
10 **might categorize the purpose of the different types of capacity that LDCs contract for**
11 **and how that might relate to flow through of those costs to ratepayers through the**
12 **PGA/ACA tariff?**

13 A. First of all, all natural gas capacity held by or owned by an LDC is not the same. From my
14 experience as a gas marketer, as a consultant, and as a participant in GISB/NAESB
15 standards work over the years, I have come to understand that with respect to capacity held
16 by LDCs, there are basically two kinds of natural gas capacity. For the purposes of this
17 testimony, I will term these two types supply reliability capacity and supply diversity
18 capacity.

19 **Q. Are these two terms used by LDCs, or are these your terms?**

20 A. LDCs talk about reliability as a primary driver for almost all of their capacity planning and
21 acquisition decisions involving capacity which can directly serve peak-day demand. As
22 for capacity that is either in excess of that amount or which is upstream capacity which
23 connects to pipeline(s) that can directly serve peak-day demand, a number of terms,
24 including "diversity" have been used. Other terms I have seen used include "flexibility,"
25 "competitive alternatives," and "avoiding reliance on one supply region." I choose
26 diversity as it can encompass all of these other terms.

27 **Q. Can you provide a working definition for each type of capacity typically held by**
28 **LDCs?**

1 A. Yes. Supply reliability capacity is that capacity which both connects directly to the
2 Company's distribution system and is required to meet peak design-day firm demand.
3 Supply reliability capacity can be on-system resources (e.g., Liquefied Natural Gas
4 ("LNG"), propane-air, or underground storage). It can also be interstate and intrastate
5 capacity pipeline capacity.

6 Supply diversity capacity is that capacity which either does not connect directly to the
7 Company's distribution system (i.e., upstream pipeline capacity which feeds supply
8 reliability capacity) or pipeline capacity which is directly connected to the Company's
9 distribution system but which is in excess of capacity required to meet peak design-day
10 firm demands.

11 **Q. With respect to supply diversity capacity why wouldn't upstream capacity that is not**
12 **directly connected to the LDC but is a necessary feed for reliability capacity be**
13 **considered reliability capacity?**

14 A. Categorizing a particular set of assets or pipeline contracts into the supply diversity
15 capacity bucket does not automatically render that capacity as excessive or unnecessary.
16 What it does mean is that such capacity requires a slightly different level of assessment as
17 to its necessity, cost-effectiveness, as well as frequency and magnitude of benefit
18 generation/loss prevention associated with such capacity.

19 **Q. Is there the potential that capacity categorized as supply diversity capacity could be**
20 **characterized as excessive or unnecessary?**

21 A. Yes.

22 **Q. And how would that determination be made?**

23 A. It would be reasonable in this current market and for the foreseeable future to characterize
24 such capacity as excessive and/or unnecessary: (1) where a particular amount of supply
25 diversity capacity's utilization was of a very low-load factor, and supplies could be
26 purchased by the holder of the downstream direct-connected capacity at the interconnect
27 to the downstream pipeline from competitive suppliers; and/or (2) competitive supplies
28 alternative to those delivered by the subject pipeline are available at a lower all-in cost.

29 **Q. Are those determinations being made in the instant proceeding?**

1 A. No. However, procedures for handling costs and the Company's recovery of costs from
2 ratepayers are at issue here, and, as discussed below, my recommendations are aimed
3 toward improving provisions used in the analysis of costs which are required as a response
4 to the evolving natural gas market.

5 **Q. Does the Company's portfolio of natural gas capacity fall into these types or**
6 **groupings, and, if so, how do these groupings impact your analysis of the Company's**
7 **supply portfolio?**

8 A. Yes, the Company's capacity portfolio contains both supply reliability capacity and supply
9 diversity capacity. These groupings are especially useful in assessing an LDC's capacity
10 portfolio and assessing an LDC's decisions with respect to acquiring, renewing, or letting
11 contracts expire. The groupings are also helpful in assessing Company assets that provide
12 these two types of capacity and how the costs of those decisions should flow through
13 PGA/ACA mechanism. The most important of these two groupings or buckets is, of course,
14 the supply reliability bucket. For an LDC, the supply reliability capacity bucket must be
15 "filled" first. After that, there is the supply diversity bucket. Historically, this second bucket
16 was often a necessary adjunct to the supply reliability bucket. However, recent
17 developments in the natural gas market make supply diversity capacity less necessary for
18 LDCs to hold/contract for than in the past.

19 **Q. Please explain the recent developments that make supply diversity capacity less**
20 **necessary to LDCs than in the past.**

21 A. Every pipeline is connected to one or more supply producing areas, or to a pipeline that is
22 connected to one or more supply producing areas. Prior to the industry restructuring of the
23 1990's, pipelines were merchants. They were merchants to their direct-connected LDCs
24 and to other pipelines with direct-connected LDC and pipeline markets. Those pipelines
25 that were either not connected to supply producing areas or did not have sufficient direct-
26 connected producer supplies to meet their customers' demands, bought gas from other
27 upstream pipelines.

28 When the pipelines were converted to transportation only lines, the gas purchase
29 agreements between pipelines were also converted to transportation agreements. For the
30 most part those pipeline to pipeline sales contracts were passed down to pipelines' LDC

1 customers with contract terms that extended through the end of the original sales contract
2 between the two pipelines. At the time of this conversion, the gas market was nowhere near
3 as developed or liquid as it is today. In addition, these pipeline to pipeline contracts that
4 were converted and passed down to LDCs were often necessary to access supply for
5 transport on the LDCs direct-connected pipelines. It was in this way that LDCs acquired
6 most of this feeder, or what I call supply diversity, capacity. Note that these upstream
7 pipelines that sold gas to the downstream pipelines were not the only pipelines
8 interconnected to the downstream line at the time of conversion.

9 With that backdrop it is important to note that in the 20 years since restructuring many
10 things have changed from their initial condition. These changes include the development
11 and proliferation of literally hundreds of liquid market hubs at which gas is bought and
12 sold on an "all-in" delivered basis ("all-in" delivered basis means that any transportation
13 costs associated with the seller delivering gas to the Company at the hub(s) are included in
14 the price of the gas when sold). These liquid trading locations[1] are often at receipt points
15 into an LDC's direct-connected supply reliability capacity pipeline. Purchasing gas at
16 these liquid points can very well be a more cost-effective way to acquire supply than
17 holding capacity on the associated upstream pipeline. This is because an LDC tends to be
18 a relatively low-load factor user of capacity to serve its native, weather sensitive load. Thus,
19 over time, what has developed, as well, are very large wholesale gas marketing companies
20 which acquire and manage upstream capacity finding ever more creative ways to increase
21 their load factors by selling to a more diverse set of markets, segmenting this upstream
22 capacity and making use of it 2 to 3 times over.

23 Taken together, these factors—initial converted contract expirations, proliferation of liquid
24 trading locations into and along direct-connected lines, and marketers functioning on
25 upstream lines more competitively with higher load factors—have increasingly led more
26 and more LDCs to turn back (i.e., not renew upstream supply diversity capacity), when it

[1] These liquid trading locations where prices are reported can be paper pools where a supply that is able to get into that section of line (including supply from other pipelines) can, often without paying transport to the pool, be traded and bought at that pool for onward delivery by a holder of transportation capacity to take gas away from that zone. In addition, many other reported pricing points are pipeline to pipeline interconnects where the downstream line does not have a paper pool that is accessible for trading.

1 became cheaper to buy gas into their downstream line at the interconnect with the upstream
2 pipeline just when they needed it rather than hold, and incur the costs of,that upstream
3 pipeline capacity.

4 **Q. Does this mean that LDCs should no longer hold supply diversity capacity?**

5 A. No, it means whether to enter into a contract for such capacity prior to commencement as
6 well as retaining it at renewal time should be evaluated against experienced historic and
7 projected utilization, experienced and projected supply and market prices, and experienced
8 and projected capacity release prices all to determine whether there is likely to be a net
9 benefit from holding the capacity, or acquiring new capacity versus just purchasing gas
10 into the LDC's supply reliability capacity at that or other locations.

11 **Q. Please discuss the supply reliability capacity bucket as it relates to the Company.**

12 A. I group the Company's on-system propane and storage capacity into the supply reliability
13 capacity bucket. This portion of the Company's supply reliability capacity is used to meet
14 the highest periods of demand on the Company's system. The periods of highest demand
15 are often referred to as the needle peaks, which on a load duration curve are the farthest to
16 the left. I also group the Company's on-system storage capacity and deliverability asset
17 into the supply reliability bucket. Then, based upon both the daily and hourly deliverability
18 as well as the total quantity of this on-system supply reliability capacity relative to the
19 Company's load duration curve, the remaining amount of demand (again against the load
20 duration curve) is the amount of supply reliability capacity to be acquired from pipelines,
21 both intrastate and interstate.

22 **Q. If an LDC, or in this case, the Company, has natural gas capacity beyond what you**
23 **term the supply reliability capacity, is that capacity then the supply diversity**
24 **capacity?**

25 A. Yes, any remaining, direct connected, interstate capacity and all upstream interstate
26 pipeline capacity that is connected to supply reliability capacity is what is deemed to be
27 supply diversity capacity.

28 **Q. Once the Company's natural gas capacity portfolio is placed into these two buckets,**
29 **what should happen next?**

1 A. Next, the portfolio should be periodically analyzed, ranking the components, based upon "all-in cost" from the lowest all-in cost to the highest all-in cost for each supply reliability capacity asset or supply reliability capacity contract as well as analyze and rank each supply diversity capacity asset and supply diversity capacity contract.

5 **Q. Please explain "all-in cost."**

6 A. All-in cost is the sum of all fixed and variable charges (including the gas commodity) associated with each asset or contract divided by the units of throughput or utilization of the asset or contract. Here, the concept is to have the LDC's or Company's capacity portfolio reliably provide supply to meet ratepayers' projected or planned demand by means of the assets and/or contracts with the lowest all-in cost.

11 **Q. What is the purpose of this ranking?**

12 A. The purpose of the ranking is to assess the relative cost-effectiveness of each existing component and determine whether, at renewal time (or otherwise), each component should be maintained, swapped-out for another more cost-effective one, or dropped altogether as excessive or unnecessary.

16 **Q. Is that periodic review by the Commission part of this proceeding?**

17 A. The content of the PGA/ACA process (i.e., how costs are accumulated and identified for recovery) is part of this proceeding. I propose that this ranking type analysis be incorporated into the PGA/ACA process to assist the Commission in reviewing the reasonableness of the costs ratepayers are asked to bear and how those costs are evolving over time. The actual ranking and analysis would occur in a future PGA/ACA docket.

22 **Q. If a new contract were to be introduced as part of the PGA/ACA process where would you categorize that new contract's capacity as between reliability capacity or diversity capacity?**

25 A. That would depend on a number of factors.

26 **Q. Before I ask you to describe those factors, are there any potential contracts which may in the near future be introduced into the PGA/ACA process?**

1 A. Yes. Laclede has entered into a twenty-year precedent agreement with Spire STL Pipeline,
2 LLC ("Spire STL," owned by Laclede's corporate parent) for 350,000 dekatherms per day
3 ("Dth/day") of firm transportation service on the Spire STL Pipeline, a proposed new
4 400,000 Dth/day natural gas pipeline designed to serve the St. Louis market. *See* Schedule
5 EDF-07. Laclede has indicated that it intends to seek recovery of the costs associated with
6 its Spire STL transportation agreement through the PGA/ACA once the pipeline becomes
7 operational. *See* Schedule EDF-08. This is an important agreement, as it is a large amount
8 of capacity with a commitment over a significant time period, and because it involves an
9 affiliate of Laclede.[2]

10 **Q. Would you please describe the factors you would consider if a new contract was**
11 **introduced as part of the PGA/ACA process.**

12 A. The potential new capacity could be either all supply reliability capacity, all supply
13 diversity capacity or a mixture of supply reliability capacity and supply diversity capacity.

14 **Q. Could you please illustrate through some proposed hypotheticals?**

15 A. There are at least four general cases to consider and the case considered drives the
16 categorization of any potential new capacity contract into one, the other, or both of the
17 supply reliability and/or supply diversity capacity bucket(s).

18 The first case (Case 1) is the retirement of Laclede's propane air capacity. Currently,
19 Laclede uses propane facilities to inject propane onto its system on peak demand days in
20 order to meet that peak demand. According to the Concentric Report, propane accounts for
21 163,200 Dthd of capacity. *See* Schedule EDF-02 at page 14. If the propane capacity were
22 to be retired, contemporaneous with or subsequent to the commencement of cost incurrence
23 under the new capacity agreement, then that portion of the potential new capacity which
24 replaces that capacity could be categorized as supply reliability capacity.

25 **Q. What is the second case?**

---

[2] Moreover, Laclede has not sought prior Commission approval to enter into this affiliate agreement or to request recovery of the costs associated with this agreement, similar to risk mitigation strategies employed by other utilities. *See, e.g.*, Florida Public Service Commission, Order No. PSC-13-0505-PAA-EI, Docket No. 130198-EI (October 28, 2013).

1 A. Case 2 is where Laclede both retires the propane-air capacity and turns back (i.e., does not
2 renew at contract expiration) capacity on another pipeline which directly connects to the
3 Company's distribution system. For instance, Enable Mississippi River Transmission
4 ("MRT") is an interstate pipeline directly connected to the Company. If Case 2 were to
5 occur, and encompass all of any new capacity (i.e., between the propane replacement
6 capacity and the MRT replacement capacity), then all of the new capacity would be
7 categorized as supply reliability capacity.

8 **Q. Please explain the third case.**

9 A. Case 3 is where Laclede again retires the propane-air capacity but instead of turning back
10 MRT capacity, Laclede turns back upstream supply diversity capacity on one or more of
11 its upstream pipelines (i.e., Panhandle, Enable Gas Transmission, NGPL, or Trunkline). If
12 Case 3 were to occur, then 163,800 Dthd would be categorized as supply reliability
13 capacity, the amount turned back on other pipeline(s) would be categorized as supply
14 diversity capacity, and any remaining would also be categorized as supply diversity
15 capacity.

16 **Q. And what is Case 4?**

17 A. Case 4 is where Laclede does not retire its propane-air facility nor does it turnback any
18 other of its portfolio of pipeline capacity contracts. If Case 4 were to occur, then all of any
19 new capacity would be categorized as supply diversity capacity.

20 **Q. Are there other possible scenarios and comparisons that might be appropriate in**
21 **reviewing potential new capacity such as Spire?**

22 A. Yes, there could be, but these appear to be probable, generally encompassing, scenarios to
23 consider at this time based on the information I have.

24 **Q. How would you address cost recovery for each of the above four cases?**

25 A. For Case 1, the Commission could review the proposition of replacing the propane peaking
26 capacity and its all-in cost against the replacement of that capacity with year-round pipeline
27 capacity used at the same load factor as that of the propane capacity to derive a comparative
28 all-in cost. As part of that review the Commission would identify the full cost of the
29 propane-air capacity plus the cost of propane and divide that by the total quantity of design-

1 winter usage (therms) and arrive at an all-in cost (per therm) for that means of meeting
2 peak demand. Then the Commission could compare that all-in cost (per therm) with the
3 all-in cost of using that portion of the Spire STL contracted capacity plus the cost of gas
4 divided by the same usage (therms) and arrive at a comparable all-in cost. The Commission
5 would then permit recovery of the lesser of the equivalent all-in cost times design-winter
6 usage of the propane capacity or the all-in cost of the new replacement capacity times the
7 same usage. In this way, at least for the propane replacement portion of the new contracted
8 capacity, ratepayers of the Company would be indifferent.

9 **Q. But the Concentric Report refers to the propane capacity as "aging", does it not?**

10 A. Yes, and should the Commission determine that instead of the recovery benchmark being
11 measured against the existing "aging" capacity, it could determine that there were other
12 benchmark(s) measures of reasonableness which could include being measured against a
13 replacement peaking propane (or LNG) capacity. Under such a measure Laclede would get
14 bids for such an updated or replacement set of propane facilities and/or LNG facilities, if
15 feasible, and use those figures to establish an all-in cost comparison for determining the
16 indifference point for Laclede ratepayers with respect to 163,200 Dthd of the new
17 contracted for capacity. Also, the Concentric Report does not state or establish that the
18 Laclede propane facilities are in need of retirement or replacement at this time but rather
19 that they are "aging." *See* Schedule EDF-02 at 16.

20 **Q. How would the recovery benchmark for the remaining contracted for capacity be**
21 **established?**

22 A. For the remaining Case 1 capacity, what I categorize as supply diversity capacity, the
23 recovery benchmark for that capacity would be based upon the same benchmark Laclede
24 uses for its Gas Supply Incentive Plan, namely the First Of Month ("FOM") Benchmark.
25 Here, the FOM Benchmark as set forth in the tariff today (without modification) would
26 establish the FOM Benchmark.

27 **Q. Please explain how the FOM Benchmark currently works in the Company's tariff.**

28 A. The FOM Benchmark is used to assess whether the Company is entitled to any shareholder
29 rewards through the GSIP portion of the Tariff. In essence, the FOM sets a weighted

1 average gas price benchmark against which the Company's actual weighted average prices
2 paid for gas are measured. If the weighted average actuals are less than the FOM
3 Benchmark, shareholders get a share of the difference.

4 **Q. How does the FOM Benchmark work in your proposal?**

5 A. The FOM Benchmark would set the cap on all-in cost for recovery of costs for gas and
6 capacity supplied by means of the remaining new capacity under Case 1. As discussed
7 below, the recovery mechanism used for the 163,200 Dthd (propane associated) as well as
8 the FOM Benchmark for the remaining new capacity under Case 1 would make Laclede
9 ratepayers indifferent to the cost of all of the new contracted capacity.

10 **Q. Has the Company acknowledged the need to consider new contracts within a larger**
11 **and more meaningful context?**

12 A. Yes, the Company has stated that its contract with Spire STL "will need to be put into the
13 larger and more meaningful context of its impact on the overall cost of delivered gas to
14 [Laclede] as a result of greater supply diversity and the opportunities such diversity creates
15 to access supplies from sources that may be more favorably priced, as well as its impact on
16 enhancing supply reliability." *See* Schedule EDF-08.

17 **<u>Recommendations to Address Affiliate Pipeline Transportation Agreements</u>**

18 **Q. What additional changes do you propose to address costs arising as a result of affiliate**
19 **agreements?**

20 A. My proposal models the language contained in Laclede's current Gas Supply and
21 Transportation Standards of Conduct. *See* Schedule EDF-05. Section A of those standards
22 pertains to purchases of gas supplies (i.e., the commodity of gas). My proposal extends this
23 same concept to pipeline capacity (i.e., transportation).

24 **Q. Does the Cost Allocation Manual and Gas Supply and Transportation Standards of**
25 **Conduct apply to affiliate pipeline transportation agreements?**

26 A. Page 6, paragraph (b) of the settlement agreement adopting the Cost Allocation Manual
27 states:

28 > Laclede shall comply with the Commission's Rules and with the terms of the CAM
29 > set forth in Appendix 1 and the Gas Supply and Transportation Standards of

1 Conduct set forth in Appendix 2 to this Unanimous Partial Stipulation and
2 Agreement ***for all future transactions with [Laclede Energy Resources] and its***
3 ***other affiliates***.[3]

4 In addition, Section 7 of the settlement agreement, with respect to Gas Costs, states:

5 the regulated gas corporation shall conduct its business in such a way as not to
6 provide any preferential service, information or treatment to an affiliated entity over
7 another party at any time.[4]

8 This general gas supply requirement is reiterated in the Gas Supply and Transportation
9 Standards of Conduct shown on Schedule EDF-05 at pages 43-44, Sections A.1 through
10 A.8 (relating to transactions that are multi-month in duration); and Schedule EDF-05 at
11 page 45, Sections B.1 through B.4 (relating to transactions that are one month or less in
12 duration). However, there is as yet no provision(s) in the Standards of Conduct applying
13 the same requirements specifically to transportation capacity.

14 **Q. Why is it appropriate to extend the requirements to transportation capacity?**

15 A. Transportation capacity under the PGA/ACA mechanism is treated as a "Gas Cost." My
16 reading of the settlement agreement's general requirement that the regulated gas
17 corporation not be "preferential" to any affiliated entity(ies) at any time means that the
18 Commission should adopt substantially similar provisions as those contained in Sections
19 A and B of the current Standards of Conduct and apply the same requirements to
20 transportation capacity.

21 **Q. Do you have specific changes to the wording of the standards?**

22 A. Yes. With respect to the new provisions relating to transportation capacity (new Sections I
23 and J), please refer to Schedule EDF-06, which presents my redline changes to the current
24 Sections A and B, to adapt those sections for use in covering acquisition of transportation
25 capacity by Laclede from an affiliate.

26 **Q. Earlier, when you discussed recovery of the costs of transportation capacity**
27 **associated with Company affiliated-transportation contracts you discussed various**

---

[3] Schedule EDF-05 at 6 (emphasis added).

[4] *Id.* at 8.

1 **recovery mechanisms. Would these recommendations be in addition to your**
2 **modifications to the Standards of Conduct discussed above?**

3 A. Yes, my proposed modifications to the PGA/ACA tariff would be in addition to my
4 proposed modifications to the Standards of Conduct.

5 **Q Why is it appropriate to include additional requirements to affiliated pipeline**
6 **transportation agreements?**

7 A. It is appropriate for two reasons. First, Spire, Inc., Laclede's corporate parent, has
8 announced a business strategy of investing in interstate pipelines. *See* Schedule EDF-09.
9 Where such investments also impose costs on regulated retail customers, such as is possible
10 under the Laclede/Spire STL arrangement, additional regulatory measures are needed to
11 ensure that customers are protected. Second, the current Gas Supply and Transportation
12 Standards of Conduct do not address or provide safeguards in the event of affiliated
13 transportation agreements.

14 **Q. What is the basis for your proposed additional requirements?**

15 A. To the extent, as set forth in my Standards of Conduct changes, the Company ***cannot show***
16 ***that*** new capacity, for which cost recovery is being sought, was: a) acquired in accordance
17 with a competitive bidding process in which requests for proposals were submitted by the
18 Company to a list of all eligible transportation providers, including non-affiliated entities;
19 and b) the price for transportation service was equal to or lower than the bids received from
20 non-affiliated transportation providers, then, to protect Company ratepayers the PGA/ACA
21 clauses should include further specificity as to the additional demonstration the Company
22 must make if it intends to seek recovery of costs associated with an affiliated pipeline
23 transportation agreement. Specifically, the Company should be required to demonstrate
24 that any services agreed to pursuant to an affiliate agreement it seeks to recover the costs
25 of are capped at the FOM Benchmark less the costs of gas acquired through the capacity.

26 **Q. Are you saying that if Laclede is either a) unable to satisfy your proposed affiliate**
27 **requirements or b) the changes you recommend to the Standards of Conduct might**
28 **not apply, you have a recommendation?**

1 A. Yes, as noted in my review of the hypothetical cases discussed above, I recommend that
2 additional measures be incorporated into the PGA/ACA clauses to assure that Laclede
3 ratepayers are indifferent to the decisions Laclede's corporate parent may make with
4 respect to having the Company enter into agreements with affiliated natural gas capacity
5 providers and/or affiliated natural gas supply providers. To the extent the standards are not
6 met, the rates would not include the additional costs incurred due to the affiliate
7 arrangement as they would not be deemed reasonable.

8 **Q. Can you provide a hypothetical example of how cost recovery would work under your**
9 **proposed changes once Laclede seeks to recover the costs of the Spire STL contract**
10 **through the PGA/ACA mechanism?**

11 A. Laclede has stated that the Spire STL arrangement has both a reliability component and
12 diversity component. *See* Schedule EDF-02 at page 4. With respect to the reliability
13 component, Laclede should be allowed to recover costs associated with the capacity
14 reservation charge associated with the 163,200 Dth/d on the new pipeline to the extent such
15 all-in costs of the 163,200 Dthd (including gas supply costs) are equal to or less than the
16 all-in cost of either the existing propane capacity under design-winter conditions or a
17 replacement set of assets should the Commission determine a replacement benchmark is
18 more appropriate in its analysis of reasonableness. This 163,200 Dthd of contracted-for
19 Spire STL capacity is equivalent to the propane air facility's daily output and the reliability
20 component of the Spire STL/ Laclede contracted capacity.

21 **Q. Please explain what you mean by capacity reservation charge.**

22 A. Under a new capacity contract Laclede will pay an amount per Dth per day for the right to
23 use the capacity. Assuming for the moment that charge is $0.25 per Dth per day, then the
24 average monthly amount would be $1,240,320 for the 163,200 Dth per day associated with
25 the propane replacement capacity. The annual 12 month cost would be $14,883,840. Once
26 Laclede buys gas and transports it through that capacity, Laclede would pay for the gas it
27 bought and pay a transportation charge for the use of the capacity to move the gas to its
28 system. Under my proposal, to the extent the total gas cost for the design-winter use of
29 natural gas instead of propane is less than the benchmark cost (which caps the total

1 recovery), then the difference in dollars would be recoverable to offset the capacity
2 reservation cost up to the $14,883,830 total reservation cost.

3 **Q. Why would it be appropriate to use the propane air facility daily output as a basis for**
4 **the amount of the capacity reservation charge recoverable for the 163,200 Dthd of**
5 **contracted new capacity?**

6 A. It is appropriate because replacement of the propane capacity requires 163,200 Dthd of
7 pipeline capacity.

8 **Q. Why would you limit the recovery to just the quantity of natural gas associated with**
9 **the design-winter quantity of propane in Dth equivalents?**

10 A. Because the design-winter quantity of propane use in Dth is what that portion of the
11 contracted capacity is replacing and has to be held in reserve to meet the same purpose(s)
12 as those met by the propane capacity. In short, ratepayers should be protected against an
13 all-in cost of year-round affiliated pipeline capacity to meet peak design-winter needs that
14 exceeds current costs (associated with the propane capacity), or, to the extent the
15 Commission determines, that exceeds a Commission approved replacement peaking
16 capacity benchmark as discussed above. This benchmark against which recovery of costs
17 should be measured is necessary so ratepayers are indifferent, cost-wise, as to how Laclede
18 seeks to replace its aging propane peak demand capacity.

19 **Q. Please further explain the supply diversity component.**

20 A. With respect to the supply diversity component, Laclede should be allowed to recover the
21 demand charges on any additional Dth/day in an amount defined as either the "Turnback
22 Allowance" plus the "FOM" Benchmark, or just the FOM Benchmark depending on which
23 of the four cases occurs in the future.

24 **Q. Please further explain the "Turnback Allowance."**

25 A. Turnback Allowance refers to the level of savings that Laclede may experience as a result
26 of not renewing or "turning back" pipeline capacity to which it currently subscribes on a
27 different pipeline because it will use some or all of the remaining Dthd of new contracted
28 for capacity as a replacement for the "turned back" capacity. The Turnback Allowance is
29 the "saved cost" per Dthd of the turned back capacity. That "saved cost" is the benchmark

1 for what Laclede would be allowed to recover from ratepayers because again, that saved
2 amount, if recovered from ratepayers leaves them indifferent as to whether Laclede kept
3 their previous capacity contract or entered into the new contract with their affiliate.

4 **Q. Can you please provide a hypothetical example?**

5 A. Assume that the capacity which Laclede were to turnback was capacity on MRT. The MRT
6 capacity which delivers gas directly to Laclede is categorized as supply reliability capacity
7 because it delivers directly to Laclede. If Laclede were to replace that supply reliability
8 capacity with its non-propane replacement capacity on a one-for-one basis (i.e., the
9 Company turns back a like amount of Dthd of MRT supply reliability capacity), then the
10 Turnback Allowance would be the avoided cost of the MRT supply reliability capacity.

11 **Q. Continue please.**

12 A. So, if the turned back MRT capacity has a cost of $0.1845 per Dthd of reserved capacity,
13 which is the undiscounted full rate for Field to Market capacity on MRT, then Laclede is
14 permitted to recover that level of demand charge cost times the daily contract quantity
15 turned back, up to the remaining Dthd of new capacity. If Laclede turns back less MRT
16 capacity than the full remaining Dthd amount under the new contract, then the lower level
17 would be used to identify the dollar amount of the Turnback Allowance.

18 **Q. What is Field to Market Capacity?**

19 A. Based upon my review of MRT's Index of Customers, the Company has an amount of
20 Field to Market capacity contracted with MRT in excess of the remaining, non-propane
21 replacement capacity we have been discussing. Field to Market capacity is capacity from
22 and through MRT's Field Zone (which encompasses all of its facilities south of the
23 Arkansas/Missouri border, i.e., Arkansas, Louisiana, and Texas) to and on its Market Zone
24 (which encompasses all of its facilities north of the Arkansas/Missouri border, i.e.,
25 Missouri and Illinois).

26 **Q. You mentioned that the recovery would also include the FOM Benchmark. Please**
27 **further explain the "FOM" Benchmark.**

28 A. To the extent Laclede utilizes the new capacity that replaced the MRT capacity and to the
29 extent the supply purchases through that capacity are at prices below the FOM, then

1 Laclede can additionally recover the difference between the FOM Benchmark and the cost
2 of gas per Dth purchased capacity that replaced the MRT turned back capacity. The
3 particulars of this are discussed below where I spell out and provide my recommended
4 changes to the PGA/ACA section of the tariff.

5 Q. **It sounds complicated to keep track of these two different portions of capacity. Do**
6 **you have a way to make it simpler to track?**

7 A. Yes. Once any new interstate pipeline contract were to come into service, the subject
8 pipeline will have capacity release provisions that come into effect and Laclede can do a
9 permanent self-release of either portion of capacity and have an administratively simple
10 way to track the different portions of the new capacity for PGA/ACA purposes.

11 Q. **Why is it appropriate to allow Laclede to recover amounts equivalent to both the**
12 **Turnback Allowance and the amounts measured against the FOM Benchmark?**

13 A. The Turnback Allowance is appropriate because Laclede ratepayers would be indifferent.
14 The reason to permit recovery of amounts measured against the FOM Benchmark is a
15 recognition of Laclede's assertion (as characterized in the Concentric Report) that the new
16 capacity will result in lower gas costs. *See* Schedule EDF-02 at 17. In recognition of this,
17 Laclede should be able to recover amounts above the Turnback Allowance up to at least
18 the full cost of the capacity reservation charges not covered by the Turnback Allowance.
19 In my opinion Laclede should have a rolling five year period in which current under-
20 recoveries (or over-recoveries) could be held to offset future over-recoveries (or under-
21 recoveries) respectively before flow-through of reductions in cost to ratepayers are put
22 through the PGA/ACA mechanisms.

23 In other words Laclede would be permitted to collect from ratepayers FOM prices on the
24 gas purchased through the new capacity up to the Dthd of MRT replacement capacity to
25 the extent that capacity is used and the delta between the actual cost of gas purchased by
26 Laclede into new capacity is less than the FOM Benchmark.

27 Q. **What if Laclede does not turnback the MRT supply reliability capacity, but instead**
28 **turns back some other capacity, namely some of its supply diversity capacity?**

1 A. The Commission could determine that there be a Turnback Allowance for replacement of
2 supply diversity capacity as well and then there would be both a Turnback Allowance and
3 additional recoveries based upon amounts measured against the FOM Benchmark. If the
4 Commission declined to permit recoveries associated with what I term a Turnback
5 Allowance, it could still permit capacity reservation charge-associated recoveries based
6 solely on the amounts measured against the FOM Benchmark.

7 **Q. Why would the Commission <u>not</u> provide a Turnback Allowance for turnback of**
8 **supply diversity capacity?**

9 A. The Commission might determine that the subject supply diversity capacity was no longer
10 cost-effectively serving its original purpose.

11 **Q. Please elaborate on what you mean by "original purpose."**

12 A. The particular supply diversity capacity may have historically accessed a prolific supply
13 that has gone into decline so its original purpose; namely accessing prolific supply may no
14 longer be served. Maybe the particular supply diversity capacity is now used at such a low
15 load factor that its all-in cost is no longer justified especially when supplies can be
16 purchased on a delivered basis when needed at an all-in cost less than that associated with
17 holding the capacity. In particular there is a trend among LDCs to trim their portfolios of
18 upstream capacity that previously fed their supply reliability capacity because of low load
19 factor utilization, low recovery of costs through capacity release, and because of liquid
20 markets to buy competitively priced supplies delivered into their supply reliability capacity
21 without having to hold upstream capacity in order to access competitively priced supplies.

22 **Q. Does that mean no recovery for the non-supply reliability (i.e., the diversity) portion**
23 **of the contracted new capacity?**

24 A. No, it means that other than amounts measured against the FOM Benchmark, it is a
25 judgment call of the Commission after it assesses the cost-effectiveness of the remaining
26 portfolio of supply diversity capacity held by Laclede. If the Commission found certain
27 reliability capacity necessary, it might not allow some or all of the cost or might find that
28 the company should take remedial measures. In any event these are all matters for the
29 Commission to determine in subsequent proceedings. I am simply putting forth the

1 reasoning behind the proposed changes to the PGA/ACA to shield ratepayers from any
2 unreasonable or inappropriate costs that may result from an agreement with an affiliate.

3 **Q. Please explain how this proposal mitigates concerns regarding the affiliate**
4 **relationship between Laclede and Spire STL.**

5 A. The proposal permits Spire, Inc., as corporate parent over Laclede, to make investment
6 decisions and contracting decisions among non-utility affiliates and its Commission-
7 regulated entity, Laclede, while at the same time enabling Laclede to provide evidence to
8 this Commission that any decisions it makes to contract with an affiliate leave ratepayers
9 no worse off than they would have been had those decisions not been made. The proposal
10 also provides the Commission with information and tools to analyze such contracts. In
11 short, the goal is that the Company's ratepayers will be no worse off than they would have
12 been absent the affiliate relationship.

13 **Q. Do you have any additional recommendations?**

14 A. I would further recommend that because Laclede will be put at risk for recovery of capacity
15 reservation charges (i.e., demand charges) for any new capacity categorized as supply
16 diversity capacity, Laclede be accorded a five year rolling period during which under-
17 collections by Laclede (from ratepayers) of the new capacity contract's capacity
18 reservation charges may be offset by over-collections (via the FOM Benchmark).

19 **Q. Please elaborate on why this is reasonable.**

20 A. By my formulation, Laclede ratepayers would be protected against incurring potentially
21 unreasonable costs associated with a corporate decision to have its state-regulated entity
22 (e.g., Laclede) contract with its non-state regulated affiliate (e.g., Spire STL). That said,
23 given that ratepayers are protected (by my formulation, indifferent), it should be considered
24 fair to permit the Company to recover costs from that affiliate agreement to the extent the
25 purported savings are realized over time. I chose five years as it provides a long-enough
26 time-horizon such that potential under-recoveries in one period may be offset by potential
27 over-recoveries in another within the rolling five year period.

28 **Q. Do you have specific language for the modifications you recommend to the PGA/ACA**
29 **section of the Company's Tariff that would implement this proposal?**

1 A. Yes, my proposed changes are set forth in Schedule EDF-03.

2 **Q. At the outset you mentioned that conforming changes should be introduced to the Gas**
3 **Supply Incentive Plan as well. What do you suggest here?**

4 A. I suggest that gas supplies acquired through affiliated pipelines be carved out from
5 consideration in the GSIP.

6 **Q. Why is that?**

7 A. Because those costs, the costs of the transportation capacity associated with capacity
8 reservation charges, are dealt with in my modifications to the PGA/ACA. Savings on gas
9 costs for gas acquired through such capacity are already dealt with in those provisions, so
10 it would be double counting if any savings were also given consideration through the GSIP.

11 **Q. Do you suggest language modifications to this end in the GSIP section of the**
12 **Company's Tariff?**

13 A. Yes. My proposed changes are set forth in Schedule EDF-04.

14 **Conclusions and Recommendations**

15 **Q. Please summarize your conclusions and recommendations.**

16 A. I recommend the Commission adopt my proposed changes to the ACA/PGA process, the
17 Gas Supply Incentive Plan, and the Gas Supply and Transportation Standards of Conduct.
18 These changes reflect recent trends in the natural gas market and are also necessary to
19 protect ratepayers from any potential unreasonable costs associated with affiliated pipeline
20 transportation agreements.

21 **Q. Does this conclude your testimony?**

22 A. Yes.

Schedule EDF-01

Schedule EDF-01: Expert Testimony of Gregory M. Lander

Name of Case	Jurisdiction	Docket Number	Date
El Paso Natural Gas Company	Federal Energy Regulatory Commission	RP04-251-000	May 3, 2004 (Testimony)
El Paso Natural Gas Company	Federal Energy Regulatory Commission	RP08-426-000	May 19, 2009 (Answering Testimony) June 2, 2010 (Supplemental Answering Testimony)
El Paso Natural Gas Company	Federal Energy Regulatory Commission	RP10-1398-000	June 28, 2011 (Answering Testimony) March 4, 2014 (Answering Testimony)
Petition of Boston Gas Company and Colonial Gas Company, each d/b/a National Grid for Approval by the Department of Public Utilities for a Firm Transportation Contract with Algonquin Gas Transmission Company	Massachusetts Department of Public Utilities	13-157	December 12, 2013 (Direct Testimony)
Petition of Boston Gas Company d/b/a National Grid for Approval by the Department of Public Utilities of a twenty-year Firm Transportation Agreement with Tennessee Gas Pipeline Company, involving an expansion of Tennessee's interstate pipeline running from Wright, New York to	Massachusetts Department of Public Utilities	15-34	June 5, 2015 (Direct Testimony)

Dracut, Massachusetts, known at the Northeast Energy Direct Project			
Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval by the Department of Public Utilities of a twenty-year Firm Transportation Agreement with Tennessee Gas Pipeline Company, involving an expansion of Tennessee's interstate pipeline running from Wright, New York to Dracut, Massachusetts, known at the Northeast Energy Direct Project	Massachusetts Department of Public Utilities	15-39	June 5, 2015 (Direct Testimony)
Petition of The Berkshire Gas Company for Approval of a Precedent Agreement with Tennessee Gas Pipeline Company, LLC, pursuant to G.L. c. 164, § 94A	Massachusetts Department of Public Utilities	15-48	June 5, 2015 (Direct Testimony)
Investigation of Parameters for Exercising Authority Pursuant to Maine Energy Cost Reduction Act, 35-A M.R.S.A. Section 1901	Maine Public Utilities Commission	2014-00071	July 11, 2014 (Direct Testimony)
Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 *et seq.*	Virginia Corporation Commission	PUR-2017-00051	August 11, 2017 (Direct Testimony)

Greg Lander, President
Skipping Stone LLC

Professional Summary:

As President of Skipping Stone Inc., Greg Lander is responsible for Strategic Consulting in the mergers and acquisition arena with numerous clients within the energy industry. Generally recognized in the energy industry as an expert, he has advised and/or given testimony at numerous Federal Energy Regulatory Commission (FERC), State, arbitration, and legal proceedings on behalf of clients. He has also advised on standards formation before the Gas Industry Standards Board (GISB) (predecessor to the North American Energy Standards Board (NAESB)). As Founder, President, and Chief Technology Officer of TransCapacity Limited Partnership, he was responsible for conceiving, planning, managing, and designing Transaction Coordination Systems utilizing Electronic Data Interchange (EDI) between trading partners. As a founding member of GISB, he assisted in establishing protocols and standards within the Business Practices, Interpretations and Triage Subcommittees.

Professional Accomplishments:

- Handled all Due Diligence for purchaser (Loews Corp) in acquisitions of two interstate pipelines, one natural gas storage complex, and ethylene distribution and transmission systems (Texas Gas Transmission, Gulf South Pipeline, Petal Storage, Petrologistics, and Chevron Ethylene Pipeline) most in excess of $1 Billion. Developed purchaser's business case model, including rate/revenue models, forward contract renewal models, export basis modeling and revenue models, and operating cost and capex models. Coordinated Engineering and Environmental Due Diligence Teams integrating findings and assessments into final Diligence Reports.
- Assisted major electric retailer in 9 states with business case development for entry into North Eastern U.S. Commercial &Industrial natural gas marketing business. Identified market share of incumbents; retail registration process, billing processes; utility data exchange rules and procedures and developed estimates of addressable market by utility.
- Handled all economic Due Diligence for purchaser of large minority stake in Southern Star Gas Pipeline. Developed purchaser's business case model, including rate/revenue models and forward contract renewal models, assessed potential competitive by-pass of asset located in "pipeline alley", developed revenue models and operating cost and capex models. Coordinated Engineering, Pipeline Integrity, and Environmental Due Diligence Teams integrating findings and assessments into final Diligence Reports.
- Developed post-acquisition integration plans for inter-operability and alterations to system operations to take advantage of opportunities presented by

synergistic facilities' locations and functions and complimentary contractual requirements. Implementation of plan resulted in fundamental changes to systems operations and improvement in systems, net revenues, capacity capabilities, and facilities utilization.

- Handled all economic analysis, modeling, and systems capability due diligence for potential purchaser in several preliminary or completed yet un-consummated pre-transaction investigations involving Panhandle Eastern, Northern Border, Bear Paw, Florida Gas, Transwestern, Great Lakes, Guardian, Midwestern, Viking, Southern Star, Columbia Gas, Midla, Targa (No. Texas), Ozark, ANR, Falcon Gas Storage, Tres Palacios, Rockies Express, Norse Pipelines, Southern Pines, Leaf River, LDH (Mont Belvieu), Kinder Morgan Interstate, Trailblazer, Rockies Express and South Carolina Gas Transmission.
- Post Texas Gas Transmission and Gulf South Pipe Line acquisitions, assisted with all investigations involving assessments and proposals for realizing potential synergies with/from asset portfolio; rate case strategy development and alternate case development; and strategies around contract renewal challenges.
- Headed up due diligence team in acquisition of multi-state retail (residential) natural gas and electric book by Commerce Energy.
- Headed up due diligence team in acquisition of multi-state retail (C&I) natural gas book by Commerce Energy.
- Served as lead consultant for consortium of end-users, Local Distribution Companies, Power Generators, and municipalities in several major FERC Rate Cases, service restructuring, and capacity allocation proceedings involving a major Southwestern U.S. Pipeline.
- Served as lead consultant and expert witness for consortium of end-users, Local Distribution Companies, Power Generators, and municipalities in major FERC rate case under litigation involving decades-long disputes over service levels, cost allocation, and rate levels.
- Served as lead consultant for consortium of end-users and municipalities in major FERC rate case involving implementation of proposed rate design, cost allocation, and rate level changes.
- Developed and critiqued Rate Case Models for several pipeline proceedings and proposed proceedings (as consultant variously to both pipeline and shippers). Activities included modeling (and critiquing) new services' rates, costs, and revenues; responsibilities included development of various alternative cost allocation/rate designs and related service delivery scenarios.
- Handled all market assessment, forward basis research, and transportation competition modeling for several proposed major pipelines and laterals, including two $1 Billion+ Greenfields projects that went into construction and operation providing new outlets for growing southwestern shale production. (Gulf Crossing and Fayetteville Lateral).

- Assessed supply and demand balance for Southwestern US (OK, TX, Gulf Coast and LA) including assessment of future demand and supply displacement associated with West Texas wind power development and its likely impact on pipeline export capacity from region.
- Assessed supply and demand balance for Northeast to Gulf Coast capacity additions including assessment of Gulf Coast demand and export growth and its likely impact on forward basis.
- Assessed start-up gas supply needs for Appalachian coal fired power plant, resulting in installation of on-site LNG storage and gasification to address lack of enough firm pipeline capacity to meet need.
- Assessed installed and projected wind-turbine capacity in ERCOT and its eventual impact on Texas electric market as wind power output approaches minimum ERCOT load levels.
- Designed and developed EDI based data collection system, data warehouse and web-based delivery system (www.capacitycenter.com) for delivering capacity data collected from pipelines to shippers, marketers, traders, and others interested in capacity information to support business operations and risk-management requirements.
- Designed pipeline capacity release deal integrating settlement system for firm users, including design and development for information services delivery on a transaction fee basis.
- Assisted client in developing proposals to increase pipeline capacity responsiveness and proposed market fixes that would create price signals around sub-day non-ratable flows, including rate proposals, sub-day capacity release markets, and measures to address advance reservation of capacity for electric generation fuel to meet sub-day generation demands.
- Developed "universal capacity contract" data model for storage of all interstate capacity contract transactions from all 60 major interstates in single database.
- Led design effort culminating in FERC-mandated datasets defining pipeline capacity rights, (including receipt capacity, mainline capacity, delivery capacity, segmentation rights, in and out of path capacity rights), Operationally Available Capacity, Index of Customers, and Transactional Capacity Reports (through GISB).
- Assembled consortium of utilities to investigate and develop large high-deliverability salt storage cavern in desert southwest (Desert Crossing). As LLC's Acting Manager, was responsible for developing business case and economic models; handling all partner issues and reporting; coordinating all field engineering, facilities design, planning and siting; and managing all environmental, legal, engineering and regulatory activities. Wrote FERC Tariff. Brought project to NEPA Pre-Filing Stage and conducted non-binding Open Season, as well as assisted with prospective shipper negotiations. Project

cancelled due to 2001 "California Energy Crisis" and contemporaneous Enron and energy trading sector implosions.

- Designed comprehensive retail energy transaction and customer acquisition data model, process flow, and transaction repository for web-based customer acquisition and customer enrollment intermediary.
- Experienced in negotiation and drafting (from both seller side and buyer side) of firm supply, firm transportation, firm storage, and power supply and capacity agreements for numerous entities including project financed IPPs and for new greenfields pipeline and expansion of storage system.
- Provided market entry assessment for large international manufacturing and service company seeking to enter U.S. micro-grid, combined heat and power, and integrated solar, gas & battery markets.
- Conducted interstate pipeline capacity utilization analysis for New England following winter of 2013/2014 price fly-up.
- Conducted PJM East interstate gas pipeline capacity utilization and comparative analysis between pipelines with standard NAESB nominating cycles versus those with near hourly scheduling practices.
- Conducted requirements analysis for several firms pursuing software selection of energy transaction systems.
- Instrumental in the formation of the GISB. Member of industry team that lead the development of the proposal for and bylaw changes related to the formation of NAESB.
- Provided support to numerous clients and clients' attorneys in disputes involving capacity contracts, capacity rights allocations, tariffs, rate cases, intellectual property rights cases, and supply contract proceedings as both up-front and behind the scenes expert.

Associations and Affiliations:

Longest serving Member of Board of Directors for NAESB and prior to that GISB - 19 years.

GISB Committees: Former Chairman, Business Practices Subcommittee – drafted approximately 450+ initial industry standards that are now codified FERC regulations (Order 567); Former Chairman, Interpretations Subcommittee – drafted and led adoption process for first 50+ standards interpretations; Former Chairman, Triage Subcommittee; Title Transfer Tracking Task Force; Order 637 GISB Action Subcommittee; and industry Common Codes Subcommittee. Currently member of NAESB Wholesale Gas Quadrant Executive Committee and of NAESB Parliamentary Committee

Past and Affiliations and Associated Accomplishments:

1981-1989: One of five initial employees of Citizens Energy Corporation, Boston Mass. Responsible for starting and growing Citizens Gas Supply, one of the first independent gas marketers of the early 1980's, into $200MM+ annual operation. Successfully lobbied for pipeline Open Access (Orders 436 and 636), introduction of pipeline Affiliated Marketer rules of conduct (Order 497), and Open Access to pipeline operational information (Order 563).

1989-1993: Independent Consultant - Natural Gas Projects, Pipeline Rate Cases, Project Financed Contract negotiations, and Independent Power markets

1993 – 1999: Founder and President, TransCapacity Service Corp – Software products and services related to pipeline capacity trading, nomination, and contracting. Raised $17 MM from industry player to establish TransCapacity. Successfully lobbied for Pipeline restructuring and formation of capacity release market (Order 636). Sold to Skipping Stone.

1999 – 2004: Principal and Partner, Skipping Stone – Energy market consultants

2004 – 2008: President of Skipping Stone following purchase of Skipping Stone by Commerce Energy, Inc.

2008: Repurchased Skipping Stone from Commerce Energy, Reformulated Skipping Stone as LLC with Peter Weigand

2008 to Present: President and Partner, Skipping Stone. In addition to handling book of clients, responsible for all Banking, Accounting, Operations, Risk Management and contract matters for Skipping Stone.

Education:

1977: Hampshire College, Amherst, MA; Bachelor of Arts

Publication:

2013: Synchronizing Gas & Power Markets - Solutions White Paper

Schedule EDF-02

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

BENEFITS OF SPIRE STL PIPELINE TO LACLEDE GAS COMPANY CUSTOMERS

PREPARED FOR:

LACLEDE GAS COMPANY

JULY 2017

PREPARED BY:

WWW.CEADVISORS.COM

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

DISCLAIMER

Concentric Energy Advisors, Inc. provides information and projections consistent with standard practices. The analyses contained herein require certain simplifying assumptions; however, it is the opinion of Concentric that these assumptions and the corresponding results are reasonable. All analyses are based on the best information available at the time they were conducted. Concentric makes no warrantee or guarantee regarding the accuracy of any forecasts, estimates, or analyses, or that such work products will be accepted by any legal or regulatory body.

TABLE OF CONTENTS

INTRODUCTION 1

A. Executive Summary 1

SECTION I: GAS UTILITY SUPPLY PLANNING PRINCIPLES 3

A. Overview 3

B. Regulatory Considerations 4

SECTION II: OVERVIEW OF LACLEDE GAS SUPPLY PORTFOLIO 9

SECTION III: EVALUATION OF BENEFITS ASSOCIATED WITH SPIRE STL PIPELINE 13

A. Overview and Context 13

B. Evaluation of Benefits of Spire STL Pipeline 13

C. Conclusion 16

SECTION IV: NUMEROUS FACTORS COULD POTENTIALLY MITIGATE OR ELIMINATE ANY FUTURE RATE IMPACT OF A CAPACITY TURNBACK 17

A. Introduction 17

B. It is Uncertain Whether All Lost Revenues Due to Capacity Turnback Would be Recoverable in Future Rates 18

C. Prior Concerns Regarding Potential Capacity Turnback Did Not Materialize 19

D. Potential for Replacement Revenues through Enhanced Bi-directional Capability 21

E. Potential for Replacement Revenues through Increased Future Natural Gas Demand Near the MRT Footprint 26

F. Potential to Decrease System Costs 28

G. Conclusion 29

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

INTRODUCTION

Laclede Gas Company ("Laclede") is a natural gas distribution company ("LDC") serving approximately 650,000 customers in St. Louis and ten other counties in eastern Missouri. As an LDC, Laclede is responsible for developing a portfolio of natural gas supply and transportation capacity sufficient to serve its customers' demands throughout the year. Laclede currently holds pipeline transportation capacity on a number of pipelines – both upstream and downstream – that are used to meets its customers' demands. In January 2017, Laclede signed a 20-year precedent agreement with the Spire STL Pipeline Project ("STL Pipeline") for firm transportation capacity of 350,000 dth/d. STL Pipeline is a proposed 65-mile greenfield pipeline project that would deliver up to 400,000 dth/d of natural gas from a connection with Rockies Express Pipeline ("REX") in Scott County, Illinois to natural gas markets in eastern Missouri, including St. Louis.

For purposes of this analysis, Concentric Energy Advisors, Inc. ("Concentric") was asked to evaluate benefits to Laclede's customers associated with the contract for capacity on STL Pipeline. [1] Concentric's evaluation relies upon publicly available information as well as information provided by Laclede. The report is organized into four sections: Section I reviews gas distribution utility supply planning principles; Section II summarizes Laclede's gas supply portfolio; Section III evaluates benefits of STL Pipeline; and Section IV identifies potential opportunities that may eliminate or mitigate any potential impacts associated with capacity turnback resulting from Laclede's contracting decision.

A. Executive Summary

Based on an evaluation of benefits to Laclede's customers associated with STL Pipeline, Concentric concludes that:

- Capacity on STL Pipeline will provide:
  - the opportunity for Laclede to enhance the diversity of its natural gas supply portfolio through increased access to supplies in the largest and, what is projected to continue to be, the most prolific supply basin in North America;
  - the flexibility to access multiple sources of supply at a liquid supply point in very close proximity to its distribution system, and thus the opportunity to further take advantage of the benefits of gas-on-gas competition;
  - the opportunity for Laclede to enhance the reliability of its natural gas portfolio by accessing greater volumes of gas from new supply basins and alternative transportation paths; and
  - the ability for high-pressure deliveries to enhance the operations of the distribution system and for Laclede to retire its aging on-system liquid propane facility.

[1] For purposes of this analysis, Concentric has not been asked to evaluate and quantify the comparative transportation path costs associated with Laclede's contract for capacity on STL Pipeline. Concentric understands that this issue is a matter for potential review before the Missouri Public Service Commission when cost recovery from Laclede's customers for such capacity is sought in a future state-level proceeding.

- These benefits to be provided by Laclede's capacity on STL Pipeline are consistent with the benefits that have been recognized by numerous state regulatory commissions in approving contracting decisions by LDCs.
- While pipeline transportation alternatives in lieu of capacity on STL Pipeline may be able to provide one or more benefits to Laclede's customers, none of the pipeline alternatives available to Laclede at the time of its decision to contract on STL Pipeline could provide all of the flexibility, diversity, reliability and operational benefits to customers afforded by STL Pipeline.
- Due to the current configuration of Laclede's distribution system and its current contracted pipeline capacity, there is the potential that Laclede may not renew up to 186,800 dth/d of capacity on Mississippi River Transmission ("MRT") if STL Pipeline is constructed and Laclede maintains its current level of citygate deliverability.
- However, it is highly uncertain as to the impact, if any, that a capacity turnback of up to 186,800 dth/d would have on future transportation rates on MRT due to both market and regulatory factors. There are a number of potential factors that could result in replacement revenues and/or decreased costs to mitigate or eliminate the future rate impact of any capacity turnback, and there is currently no evidence that such measures are not feasible. For example:
  - The Federal Energy Regulatory Commission ("FERC" or the "Commission") does not have a specific policy on the treatment of capacity turnback costs for ratemaking purposes in a litigated proceeding, and as such, there is clearly regulatory uncertainty as to the recoverability of costs related to capacity turnback, and the magnitude of such recovery in future rates.
  - Concerns raised by MRT regarding the impacts of capacity turnback in the past have not materialized.
  - There is the potential to fully or partially replace any lost revenues associated with capacity turnback by enhancing the capability of MRT to transport gas bi-directionally on its system, and in particular, move substantial volumes from north-to-south. Expanding the capability to move gas bi-directionally or counter to traditional flow paths has been, and is continuing to be, done by numerous pipelines, and MRT's parent has previously highlighted this as an opportunity when presenting to investors regarding the impact of STL Pipeline.
  - Increased regional demand from natural gas-fired generation or other industrial demand may provide an opportunity for MRT to mitigate the impact of any capacity turnback associated with Laclede.
  - If MRT is unable to re-contract all or a portion of turn backed capacity, MRT may be able to reduce its costs through mothballing and/or abandoning certain facilities on its system to rationalize the capability of its system with the ongoing demand for its capacity. This is an approach that other pipelines have taken when faced with similar circumstances.
- Considering the high degree of uncertainty associated with the capacity that may be turned back by Laclede, and the opportunities that may exist for MRT to re-sell the capacity or otherwise mitigate costs associated with such turnback, it would be premature to conclude that a turnback of capacity would result in a significant future rate impact to MRT's shippers.

SECTION I:
GAS UTILITY SUPPLY PLANNING PRINCIPLES

A. Overview

One of the responsibilities of an LDC is to develop a portfolio of natural gas supplies that can be delivered to its service territory to serve customer demand. Typical LDC gas supply portfolios consist of some combination of gas supplies purchased at a liquid trading point, long-haul and/or short-haul pipeline capacity, underground storage, peaking supplies (*e.g.*, LNG, liquid propane, propane air), and citygate delivered supplies. Not all utilities hold all types of gas supply assets; specific circumstances dictate the types of assets held by a particular utility (*e.g.*, location, access to specific assets, cost, and market conditions).

There are also several different approaches to acquiring assets for a gas supply portfolio. Utilities execute contracts to purchase natural gas supplies and to obtain access to pipeline capacity, storage, or peaking supplies. These contracts typically vary in duration, with contracts for existing infrastructure typically shorter term (*e.g.*, one season to a few years), while contracts for new infrastructure typically longer term (*e.g.*, 10-20 years), although there are exceptions to both. Alternatively, utilities can build or acquire assets – both natural gas supplies and infrastructure – for their gas supply portfolios.

In addition to type of asset and method of acquisition, there are several other factors to consider when choosing assets to include in a gas supply portfolio. Important considerations include: ability to meet forecasted demand, cost level and stability, flexibility, diversity, reliability, and operational considerations.

> *Ability to Meet Forecasted Demand*: Because LDCs are required to meet firm customers' needs under a variety of weather and economic conditions, and because factors such as future weather are difficult to predict, utilities typically build gas supply portfolios that can meet customers' forecasted needs under a wide range of demand scenarios. For example, it is important to ensure that an LDCs' gas supply portfolio is sufficient to meet customer demands under extreme cold conditions, known as "design day," "design winter," and "design year." It is also critical that an LDC's gas supply portfolio be designed to serve daily fluctuations in demand that occur as a result of changing weather. It is not appropriate to plan solely for an average demand day, as many days will have demand that exceeds an average day and LDCs have an obligation to serve and are responsible for delivering under extreme weather conditions.
>
> *Cost*: The total cost to acquire and deliver gas supply to customers is clearly an important factor for utilities to consider when developing a gas supply portfolio to ensure that customers are being served in cost effective and reliable manner. Cost encompasses both cost level as well as cost stability. Especially for assets that have long lives or long-term contracts, it is important to not only consider cost today, but the potential for significant changes in costs over time. Cost stability is one reason that many LDCs utilize hedging as part of their overall gas supply portfolio strategy.

Flexibility: Flexibility refers to the ability of a gas supply portfolio to serve potentially changing needs over time. For example, demand growth may not be uniform across the service territory. To the extent that assets provide the flexibility to change delivery points to suit the needs of shifting load centers, those assets would provide greater value to the portfolio than assets that have one fixed delivery point. The flexibility to access multiple supply sources or to allow for intra-day load swings are other examples of flexibility that add value to a gas supply portfolio.

Diversity: Having access to a diverse range of gas supplies, transportation paths, and types of assets in the portfolio provides value in the sense that it provides the opportunity to mitigate the effects of a price spike and to take advantage of lower prices in different locations. If a utility purchases all its gas from one supply location, and has not hedged, its customers will be subject to price swings experienced in that supply location. Adding diversity to an LDC's portfolio through access to multiple supply locations or through adding storage can provide value by mitigating the effects of price swings.

Reliability: Because utilities have an obligation to serve firm customers, it is critical that the supply portfolio provide utilities with reliable delivered gas supplies. Generally, utilities back-up their obligations to firm customers with firm supply contracts and corresponding pipeline transportation capacity. While supply and delivery disruptions, and restrictions due to weather, operational issues, or other factors are generally rare, they do occasionally occur, and these upstream reliability concerns are often considered when making portfolio decisions.

Operational Considerations: Operational considerations must be factored into the decision-making process due to the specific configurations of a distribution system, the size, location, and needs of customers, and the ability of gas to be transported across the distribution system. Due to the unique characteristics of distribution systems, utilities may have requirements to receive certain amounts of natural gas at specific locations on their system to maintain delivery pressures, serve growing loads and/or allow for greater flexibility or security of supply. These operational considerations also play a role in determining an appropriate gas supply portfolio.

Overall, there are many factors that must be considered when a utility develops a gas supply portfolio. As a result of balancing these factors, and the inherent uncertainty associated with future gas supply and prices, there is no one optimal portfolio. In addition, due to changing circumstances over time, different portfolio decisions may be appropriate at different times.

B. Regulatory Considerations

Gas utilities have an obligation, as overseen by their state regulator, to procure natural gas supply and associated delivery capacity for their customers at reasonable prices and terms while continuing to provide safe and reliable service. Many state utility commissions, including Missouri, cite in their mission statement the goal of ensuring cost-effective and reliable energy for consumers. The Missouri Public Service Commission's mission statement states:

We will:

- ensure that Missourians receive safe and reliable utility services at just, reasonable and affordable rates;
- support economic development through either traditional rate of return regulation or competition, as required by law;
- establish standards so that competition will maintain or improve the quality of services provided to Missourians;
- provide the public the information they need to make educated utility choices;
- provide an efficient regulatory process that is responsive to all parties, and perform our duties ethically and professionally.

There are numerous examples of state regulators recognizing the value and importance of both non-cost as well as cost factors when evaluating utilities' decisions to contract for pipeline capacity.

For example, the Missouri code of regulations recognize that prudent portfolio planning for LDCs in the state includes providing price stability to customers. Specifically, the regulations state that it is commission policy that LDCs should "undertake diversified natural gas purchasing activities as part of a prudent effort to mitigate upward natural gas price volatility and secure adequate natural gas supplies for their customers."[2]

The Public Service Commission of Wisconsin ("PSCW") has also recognized the importance that pipeline-on-pipeline competition can provide for gas customers in Wisconsin. For example, in a broad inquiry conducted by FERC into the issues facing the natural gas industry after the issuance of Order Nos. 636, *et. al.*, the PSCW submitted comments highlighting the benefits of pipeline competition:

> The bottom line of all of this increased competition is that, where it exists, pressure is being put on the pipelines to discount their capacity to meet competition. In many ways, the degree to which customers have access to discounted capacity is a sign of the degree of competition in a market.
>
> .....
>
> Interconnecting pipelines improves the likelihood of achieving effective competition in natural gas markets. The more routes available to the customer, the greater the bargaining power of the customer.
>
> .....
>
> In addition to discounting, less restrictive contract terms are more readily available outside of Wisconsin.[3]

In the same proceeding, the primary concern expressed by the PSCW was that Wisconsin was not benefitting from such competition, such competition was opposed by incumbents, and that additional pipeline capacity to provide competition was needed.

> It is also interesting to note that ANR Pipeline, which is the only supplier to most of the eastern part of the State, and Northern Natural Gas, which is the only supplier to

2 4 C.S.R. § 240-40.018.

3 *Issues and Priorities for the Natural Gas Industry*, Comments of the Public Service Commission of Wisconsin, Docket No. PL97-1, April 29, 1997, pp. 4-6.

> most of the western part of the State, have both gone on record in opposition to the construction of new pipelines that could provide alternative supply options to Wisconsin. This is consistent with their attempts to retain their market power in those areas. . . . But what is in ANR's and Northern Natural's best interests is not necessarily consistent with the interests of Wisconsin's natural gas consumers or the spirit and intention of FERC Order 636. The continued existence of the pipelines' market power hurts our consumers as much as it helps the pipelines.
>
> .....
>
> It is clear that the Wisconsin situation does not fit the national mold that has evolved in most regions since the issuance of Order 636. We suggest that without additional pipeline competition in our state, this means that FERC policy applied to Wisconsin may very well have to be different than that employed in other geographic areas where the structure of the market is more conducive to effective competition.[4]

Similarly, when the PSCW made a preliminary decision in 2001 on the need for a lateral proposed by Wisconsin Gas Company ("WGC") to tie into the Guardian pipeline project to compete against the incumbent ANR Pipeline, the PSCW recognized the reliability and competitive benefits that Guardian's new pipeline infrastructure would bring. Specifically, in its Findings of Fact, the PSCW concluded that "[t]he co-existence of the lateral and Guardian with ANR would improve the reliability of WGC's natural gas supplies relative to the reliability level associated with ANR alone," and would "...provide a competitive alternative for interstate natural gas transportation."[5] In addition, the PSCW noted that if WGC's lateral to Guardian were not built, "existing pipelines will have less incentive to offer discounts for services on their facilities" and that "[w]here competitive options are limited . . . ANR has little incentive to offer discounts, or will offer only small discounts."[6]

In fact, in its decision, the PSCW highlighted the importance of having actual infrastructure to serve as a competitive threat.

> The construction of a pipeline and lateral that serves WGC is more likely to put competitive pressure on existing pipelines than is the threat of competition. ...If the lateral and Guardian are not built, it is reasonable to assume that when current contracts expire, existing pipelines will reduce or eliminate discounts for service to those areas of the WGC service territory not subject to competition.
>
> .....
>
> What ANR is saying is that where real competition exists, it will offer significant discounts. Where competitive options are limited, however, ANR has little incentive to offer discounts, or will offer only small discounts. This reflects the basic economic case in favor of constructing new facilities, such as Guardian and the connecting lateral.
>
> .....
>
> In the Guardian proceeding, the FERC has found the market for interstate pipeline capacity to Wisconsin to be ripe for competition. The FERC's finding in this regard is consistent with the notion that the threat of competition is a poor substitute for real

4 *Id.*, pp. 6-7.

5 Public Service Commission of Wisconsin, Preliminary Decision, Docket No. 6650-CG-194, February 23, 2001, p. 3.

6 *Id.*, p. 4.

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

> pipe-in-the-ground competition. [PSCW] has taken that position in past filings with the FERC.[7]

The PSCW noted in its decision that the notion of the need for physical infrastructure in the ground to serve as a competitive threat was also supported by a number of consumer groups in that proceeding.[8]

The New Jersey Board of Public Utilities ("NJBPU") has recently recognized the importance of diverse connections to mitigate the impact of potential disruptions. In approving the construction of the Southern Reliability Link Project ("SRL"), an approximately 30-mile pipeline project proposed by New Jersey Natural Gas Company ("NJNG"), the NJBPU concluded that the additional capacity was necessary due to "the potential for an upstream supply interruption or disruption" on NJNG's system, and that, "[t]he SRL will provide a significant, diverse feed to NJNG's transmission system and support the integrity of such, while minimizing the risk of an interstate supply interruption."[9] The NJBPU made a similar finding in a recent South Jersey Gas Company case.[10]

The Massachusetts Department of Public Utilities ("Department") has also noted that its well-established standard of review in considering LDCs' pipeline contracts includes both price and non-price factors:

> In comparing the proposed resource acquisition to current market offerings, the Department examines relevant price and non-price attributes of each contract to ensure a contribution to the strength of the overall supply portfolio. As part of the review of relevant price and non-price attributes, the Department considers whether the pricing terms are competitive with those for the broad range of capacity, storage, and commodity options that were available to the LDC at the time of the acquisition, as well as with those opportunities that were available to other LDCs in the region. In addition, the Department determines whether the acquisition satisfies the LDC's non-price objectives including, but not limited to, flexibility of nominations and reliability and diversity of supplies.[11]

Similarly, in a rulemaking regarding pipeline contracting and pipeline access by California utilities coming out of the California energy crisis, the California Public Utilities Commission ("CPUC") found that:

> A diverse portfolio approach for the holding of interstate capacity across supply basins and interstate pipelines with staggered terms maximizes opportunities to benefit core customers with enhanced supply reliability and gas price stability.[12]

---

7 *Id.*, pp. 3-4, 12-14; [clarification added].

8 *Id.*, p. 13.

9 Decision and Order, New Jersey Board of Public Utilities, Docket No. GO15040403, March 18, 2016.

10 Decision and Order, New Jersey Board of Public Utilities, Docket No. GO13111049, December 16, 2015.

11 Order, Massachusetts Department of Public Utilities, D.P.U. 15-48, August 31, 2015.

12 Order Instituting Rulemaking to Establish Policies and Rules to Ensure Reliable, Long-Term Supplies of Natural Gas to California, California Public Utilities Commission, Rulemaking 04-01-025, Decision 04-09-022, September 2, 2004.

After the rulemaking, when approving Pacific Gas and Electric Company's ("PG&E") request to contract for capacity on the new greenfield Ruby Pipeline, the CPUC concluded:

> Acquiring Ruby capacity will provide needed diversification for the Core Gas Supply portfolio by adding a fourth interstate pipeline and a third major gas supply region. The added diversification will increase supply security, reliability, and price stability. It should also help PG&E to exploit differences in the price of gas among supply regions, thereby lowering costs for ratepayers.
>
> .....
>
> The additional security and reliability afforded by the Ruby Pipeline will provide significant benefits.
>
> .....
>
> While the ultimate outcome 15 years hence cannot be known, PG&E's analysis suggests that it is likely the proposed Ruby Pipeline capacity will advance the [CPUC]'s policy objectives of gas supply security, reliability, and price stability at no additional cost – or even less cost – to core gas customers.[13]

The North Carolina Utilities Commission ("NCUC") recently approved Piedmont Natural Gas Company's contracts on the proposed greenfield Atlantic Coast Pipeline ("ACP"), of which Piedmont is an equity investor. In its order approving the contracts, the NCUC noted that Piedmont indicated the pipeline would provide numerous benefits:

> Piedmont stated that this pipeline will provide a multitude of benefits to the State, including access to substantial quantities of shale gas supply from the Marcellus and Utica formations at highly liquid receipt points, access to significant new interstate transportation capacity at favorable rates, and significant operational benefits to Piedmont resulting from the interconnection of Piedmont facilities in the eastern part of North Carolina to ACP's new high pressure facilities, which will support significant additional natural gas deliverability in eastern North Carolina at substantial cost-savings compared to other available options.[14]

As demonstrated above, many factors are considered by gas utilities and regulators when evaluating the reasonableness of natural gas supply portfolio decisions.

---

13 Decision Approving Gas Transportation Arrangements, California Public Utilities Commission, Decision 08-11-032, November 6, 2008; [clarification added].

14 Order Accepting Affiliated Agreements for Filing and Permitting Operation Thereunder Pursuant to G.S. 62-153 and Authorizing Piedmont to Enter Into Related Redelivery Agreements, North Carolina Utilities Commission, Docket No. G-9, Sub 655, October 28, 2014.

SECTION II:
OVERVIEW OF LACLEDE GAS SUPPLY PORTFOLIO

As noted, Laclede serves approximately 650,000 customers in St. Louis and other areas of eastern Missouri. Laclede's planning standard is for a design winter based on the weather pattern experienced during the winter of 1935-1936 because it is the most difficult winter to meet from a supply adequacy perspective due to a 5-week cold period that occurred from January to mid-February.[15] Total sendout during the design winter for Laclede is expected to be approximately 76 Bcf, and approximately 110 Bcf for the year that includes a design winter (assuming a 365 day year). Laclede plans for peak design day sendout ranging from 990 MMcf to 1,183 MMcf, depending on the scenario. In addition, while Laclede expects that it will experience load shifts within its service territory over time, Laclede does not expect any significant growth or decline in the forecasted demand over time.

To serve customer demand, Laclede's current gas supply portfolio is comprised of a variety of supply contracts, long-haul and short-haul pipeline transportation contracts, off-system storage, on-system storage, and on-system propane. Concentric's evaluation is focused on Laclede's transportation, storage and peaking facilities; therefore, Laclede's existing gas supply contracts are not considered as part of this analysis, but rather the analysis assumes that Laclede will continue to purchase gas at liquid trading points most proximate to its service territory.

Laclede currently holds pipeline transportation contracts on eight interstate pipelines, each of which is described below:

- *Mississippi River Transmission ("MRT")*: MRT consists of approximately 1,650 miles of pipe, that includes: (i) the mainline ("MRT-ML") segment spanning from Louisiana to Missouri (including deliveries to Laclede's citygates); (ii) a west line ("MRT-W") that runs from eastern Texas and connects to the mainline in northern Louisiana, and (iii) an east line ("MRT-E") that runs from central Illinois, with interconnects with multiple pipelines, to Laclede citygates in St. Louis. Approximately 21% of the system miles were installed prior to 1950, and more than 62% of the system miles were installed prior to 1970. Laclede can use its capacity on MRT in multiple ways. First, it can purchase gas on the MRT-W or the MRT-ML segments in northern Louisiana or Arkansas, and deliver it directly to Laclede's citygates using the MRT-ML. Laclede can also use its capacity on the MRT-ML to deliver gas from Enable Gas Transmission ("EGT") to Laclede's citygate. In addition, Laclede can use its capacity on the MRT-E leg to deliver gas from Trunkline Gas Company ("Trunkline") or Natural Gas Pipeline Company of America ("NGPL") to Laclede's citygate. Lastly, Laclede holds a contract for underground storage service on MRT as well as a southbound contract to fill its storage on MRT.
- *EGT*: The EGT system consists of approximately 5,950 miles of pipe, with the majority of the facilities in Arkansas and Oklahoma, with lesser amounts in Louisiana and northeastern Texas, and very small amounts in Kansas, Mississippi, Missouri, and Tennessee. Over 11% of the system miles were installed prior to 1950, and more than half of the system miles were

[15] Laclede Gas Resource Plan, August 2016.

installed prior to 1970. EGT does not deliver directly to Laclede's citygates, but rather Laclede requires one or more downstream pipelines in conjunction with EGT in order to deliver gas to its citygates. Specifically, Laclede can purchase gas in Oklahoma on EGT, and then transport that gas to either the MRT-ML for delivery to its distribution system or to Trunkline for subsequent redelivery to the MRT-E, for ultimate delivery to its distribution system.

- *NGPL*: NGPL consists of over 9,000 miles of pipe, with two legs – one from New Mexico, the Texas panhandle and Oklahoma, and the other from eastern and southern Texas and Louisiana, connected by a crossover – that deliver gas to the Chicago metropolitan area. More than 11% of the system miles were installed prior to 1950, and more than 75% of the system miles were installed prior to 1970. NGPL does not deliver directly to Laclede's citygates, but rather Laclede can purchase gas in either Oklahoma or Texas and transport that gas on NGPL to the MRT-E for redelivery to Laclede citygates.
- *Trunkline*: Trunkline consists of over 2,200 miles of pipe, spanning from southern Texas to the Indiana/Michigan border. None of Trunkline was installed prior to 1950, but over 90% of the Trunkline system miles were installed between 1950 and 1970. Trunkline does not deliver directly to Laclede's citygates, but rather Laclede can purchase gas in either south Texas or east Louisiana and transport that gas on Trunkline to the MRT-E for redelivery to Laclede citygates. In addition, Laclede can use its capacity on Trunkline to bring gas from EGT to the MRT-E for ultimate delivery to Laclede. Finally Laclede can also use its capacity on Trunkline to bring gas from Panhandle Eastern Pipeline ("PEPL") to the MRT-E through a backhaul on Trunkline .
- *PEPL*: PEPL consists of approximately 6,000 miles of pipe, spanning from the Oklahoma panhandle to Michigan. More than 42% of the system miles were installed prior to 1950, and close to 90% of the system miles were installed prior to 1970. PEPL does not deliver directly to Laclede's citygates, but rather Laclede can purchase gas in western Kansas or western Oklahoma, and transport that gas on PEPL either to MoGas for ultimate redelivery to Laclede, or to Trunkline (backhaul) and then to the MRT-E for delivery to Laclede.
- *REX*: REX consists of over 1,700 miles of pipeline from Wyoming to Ohio, directly accessing both Rockies production and Marcellus/Utica production. The REX system currently provides bi-directional capability to flow gas both west-to-east out of the Rockies and east-to-west out of the Marcellus/Utica. REX is a relatively new pipeline, with all of its system installed since 2000. Laclede can purchase Marcellus/Utica shale gas in eastern Ohio on REX and transport that gas to MoGas for ultimate delivery to Laclede's citygates.
- *MoGas Pipeline ("MoGas")*: MoGas is a regional pipeline that consists of approximately 263 miles of pipe, almost all located in Missouri, with a very small amount of pipe located in Illinois. More than 26% of the system miles were installed prior to 1950, with the rest of the system miles were installed since 1980. MoGas is directly connected to the Laclede distribution system, but is not directly connected to upstream production. Therefore, Laclede can use its capacity on MoGas to bring gas from either PEPL or REX for delivery to its citygates.

- *Southern Star Central ("SSC")*: SSC is a reticulated system that consists of approximately 5,850 miles of pipe, primarily in Kansas, Oklahoma and Missouri, with lesser amounts in Wyoming and Colorado, and very small amounts in Texas and Nebraska. Almost 25% of the system miles were installed prior to 1950, and over 58% of the system miles were installed prior to 1970. Laclede's existing SSC contracts provide the capability to purchase gas in western Oklahoma and the Texas panhandle and transport that gas on SSC directly to Laclede's citygates.

As summarized in the figure below, Laclede currently holds upstream and downstream firm pipeline transportation and storage contracts that provide a total of 1,265,829 dth/d of deliverability to Laclede's citygate. This capacity is comprised of 743,622 dth/d of long-haul pipeline transportation capacity, 357,000 dth/d of on-system storage deliverability, and 163,200 dth/d of propane deliverability. Laclede's existing gas supply portfolio is presented in the figure below:

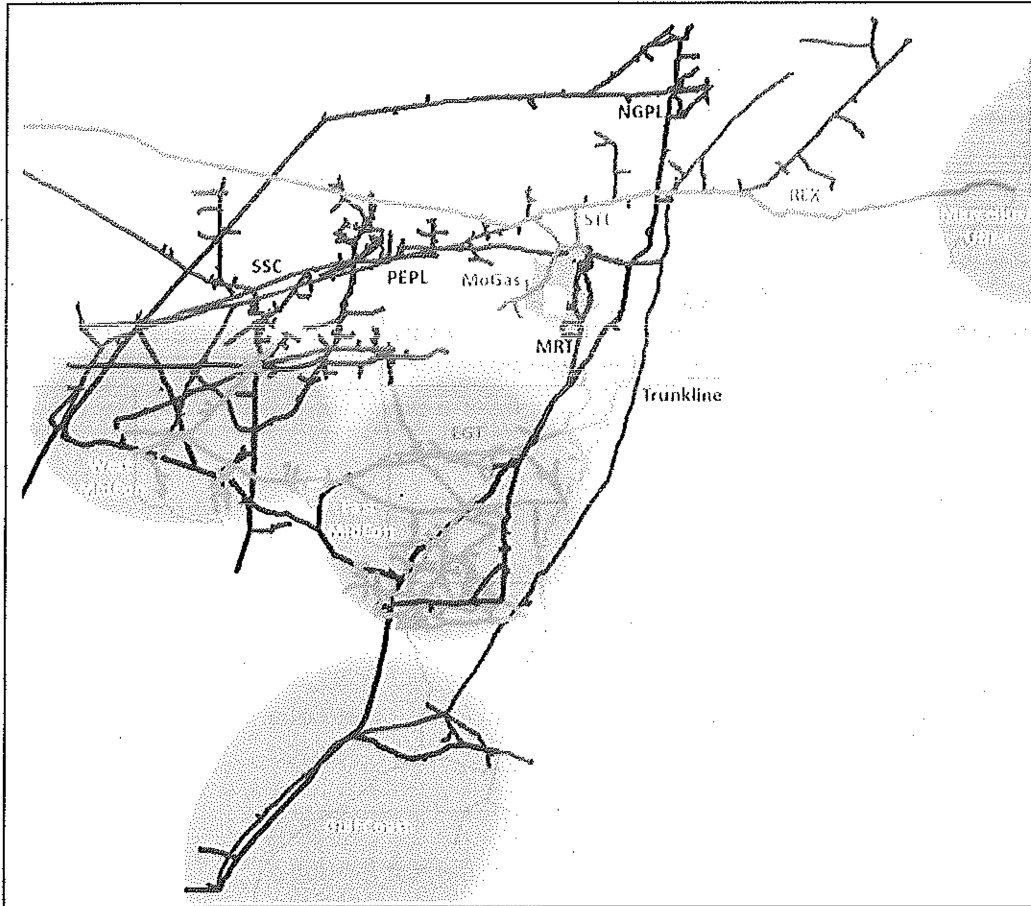
Figure 1: Laclede's Existing Gas Transportation and Storage Portfolio (dth/d) [16]

Citygate Supplies	Current Portfolio
MRT	660,329
MoGas	55,000
SSC	30,300
On System Storage	357,000
Propane	163,200
STL	-
Total	**1,265,829**
Upstream Pipelines	**Current Portfolio**
EGT	135,000
NGPL	80,000
Trunkline	90,000
PEPL	45,462
REX	20,000
Total	**370,462**
Storage	**Current Portfolio**
MRT Max Withdrawals	383,226
MRT Capacity	22,000,000

The following map illustrates the pipelines on which Laclede holds capacity, as well as general locations where Laclede can purchase gas with its existing gas supply portfolio.

[16] Note that Laclede's contracted capacity on MoGas is 62,800; however, 7,800 dth/d of capacity on MoGas is supplied by MRT-E, and is included in the MRT capacity. Therefore, 7,800 dth/d was removed from the MoGas capacity to avoid double counting in the total citygate deliverability.

Figure 2: Map of Pipelines in Laclede's Existing Portfolio, plus STL Pipeline



Laclede currently purchases the vast majority of its gas supplies in three regions: (1) western-central Oklahoma (*i.e.*, west MidCon); (2) northern Louisiana, Arkansas, and eastern Oklahoma/east Texas (*i.e.*, east MidCon); and (3) southern Texas and southern Louisiana (*i.e.*, Gulf Coast). In December 2016, Laclede added the REX contract to its portfolio, which allows it to purchase a small amount of supply (*i.e.*, 20,000 dth/d) from the Marcellus/Utica in eastern Ohio utilizing its existing transportation portfolio.

SECTION III:
EVALUATION OF BENEFITS ASSOCIATED WITH SPIRE STL PIPELINE

A. Overview and Context

In January 2017, Laclede signed a precedent agreement for 350,000 dth/d of firm transportation service on STL Pipeline for a term of 20 years commencing when STL Pipeline enters service (currently estimated to be November 1, 2018). Natural gas will be received at STL Pipeline's interconnect with REX in Scott County, Illinois, and will be delivered directly to Laclede's citygate.

As noted, Concentric has been asked to evaluate benefits to Laclede's customers associated with the contract for capacity on STL Pipeline. Concentric's evaluation relies upon information available at the time the contracting decision was made (*i.e.*, January 2017), and considers how STL Pipeline contributes to Laclede's overall gas supply portfolio.

B. Evaluation of Benefits of Spire STL Pipeline

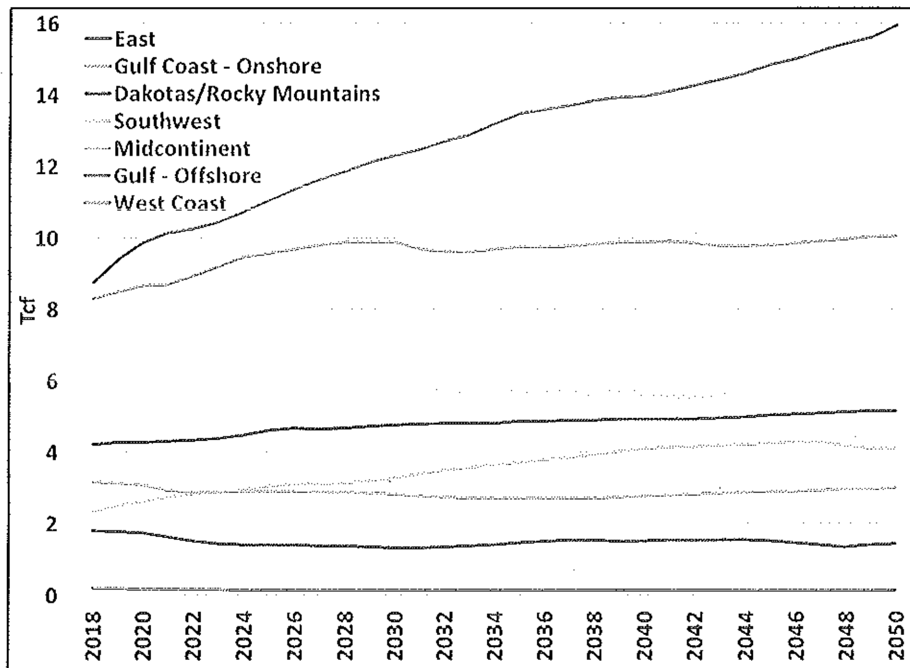
STL Pipeline provides many important benefits to Laclede's customers, including, access to an increased diversity of supplies, enhanced flexibility of supplies, improved reliability of supply and pipeline capacity, operational considerations, and the ability to retire Laclede's aging liquid propane facility while continuing to reliably meet customer demand.

1. *Increased Supply Diversity*

STL Pipeline provides the opportunity for Laclede to enhance the diversity of its natural gas supply portfolio through increased access to supplies that it has not traditionally accessed. As discussed previously, 98% of Laclede's current portfolio accesses supplies from south and west of Missouri (*i.e.*, west MidCon, east MidCon, and the Gulf Coast) and the remaining 2% accesses supplies from the east (*i.e.*, Marcellus/Utica). STL Pipeline is proposed to interconnect with REX, north of St. Louis, providing Laclede's customers with significant access (*i.e.*, 350,000 dth/d) to supplies to which Laclede currently does not have such significant access. Specifically, REX provides direct access to natural gas produced in the Marcellus/Utica supply areas, which is the largest and is projected to continue to be the most prolific supply basin in North America. Marcellus/Utica natural gas supplies have grown significantly over the last decade, and are expected to continue to grow faster than any other location in North America. In 2012, Pennsylvania natural gas production surpassed the traditional production areas of Louisiana, Oklahoma, and Federal offshore gas production, becoming the second largest gas producing state in the United States. In fact, the Marcellus basin is the largest and most productive natural gas producing basin in the US, and the east region, where the Marcellus/Utica basins are located, is widely expected to continue to be the dominant natural gas producing region over the next several decades.[17]

[17] *See, e.g., Natural Gas Explained: Where Our Natural Gas Comes From*, EIA, updated January 10, 2017; accessed at: https://www.eia.gov/energyexplained/index.cfm?page=natural_gas_where.

Figure 3: Lower 48 Natural Gas Production by Supply Region[18]



The development of abundant natural gas supplies in the Marcellus/Utica region has completely changed the United States' gas flows and created unprecedented cost savings and reliability advantages. As a result, many utilities and other natural gas users have been attempting to shift their gas supply portfolios to provide access to this substantial and growing source of supply. STL Pipeline provides Laclede's customers greater access to these prolific Marcellus/Utica natural gas supplies through REX, mitigating Laclede's existing heavy reliance on the MidCon and Gulf Coast supplies, thus diversifying gas supply options for the benefit of Laclede's customers.

2. *Enhanced Flexibility*

In addition to diversity, STL Pipeline provides the flexibility to access multiple sources of supply at a liquid supply point in very close proximity to its distribution system. Specifically, STL Pipeline's interconnect with REX does not only provide direct access to Marcellus/Utica supplies, but it also provides direct access to Rockies supplies, as well as indirect access to Gulf Coast, MidCon, and potentially western Canadian supplies through its various interconnects with a number of interstate pipelines.

REX was originally built to transport natural gas produced in the Rocky Mountain region to markets in the east, thus REX provides direct access to gas produced in the Rockies. However, with the significant development of production in the Marcellus/Utica since the pipeline's initial development, REX has undertaken a number of projects to also allow significant quantities of gas to flow in the reverse direction (*i.e.*, transporting Marcellus/Utica gas toward the west). In fact, over the past few years, REX has increased its capability through a series of expansion projects to move

[18] EIA, Annual Energy Outlook 2017.

Marcellus/Utica gas from east-to-west by 2.6 Bcf/d. In addition, REX provides access other supply regions through interconnects with a number of interstate pipelines. The flexibility to access a number of supply sources increases the gas-on-gas competition and thus increases the benefits of buying gas at points on REX. As a result, REX Zone 3 (the portion of the system extending from central Missouri to REX's terminus in eastern Ohio) has seen significant trading volume and thus liquidity for third-parties seeking to purchase gas supplies at REX Zone 3. Platts Gas Daily initiated price reporting for REX Zone 3 in October 2015, and for 19 of the first 20 trading days after the most recent REX east-to-west expansion came online in January 2017, the volumes traded at REX Zone 3 were in the top 8 of the 109 points reported by Platts Gas Daily.

The importance of the relatively high trading volume at REX Zone 3 is that it provides a liquid trading point near Laclede's service territory. LDCs typically contract for pipeline capacity back to the nearest liquid trading point to minimize transportation costs, provide supply security, allow price transparency, and enable the flexibility of transactions with multiple potential counter-parties. Because of the increased liquidity at REX Zone 3, STL Pipeline allows Laclede the flexibility to transact at a liquid point very near its citygate served by multiple supply sources for the benefit of its customers.

3. *Increased Reliability*

Because STL Pipeline is a relatively short distance greenfield build that directly connects Laclede's citygate to REX Zone 3 where there are numerous sellers of gas, it provides Laclede's customers a new large transportation path to access natural gas supplies. By providing an entirely new transportation path, STL Pipeline enables Laclede to mitigate any potential upstream supply disruptions or transportation restrictions on existing pipeline transportation paths already in its portfolio, and thus improves the chances that Laclede will be able to continue to meet its customers' needs under potential adverse conditions. In addition, while natural gas pipeline service is generally a very reliable means of delivering energy, new infrastructure, such as STL Pipeline, is less likely to face operational restrictions going forward relative to the significantly older infrastructure that Laclede currently utilizes to transport gas supplies to its citygates. As a result, STL Pipeline enhances the overall delivery reliability of Laclede's gas supply portfolio.

In addition, the existing, relatively older pipelines in Laclede's portfolio will likely be subject to future modernization costs. Although the magnitude of these costs have not been quantified, the Commission has identified pipeline modernization costs as an issue facing the pipeline industry and has established policies to allow pipelines to recover such modernization costs through a tracking mechanism.[19] The FERC has recognized that many older pipelines are likely to incur significant additional costs to comply with new safety and environmental regulations. As noted previously, between 50% and 90% of the pipeline miles on the MRT, EGT, NGPL, Trunkline, and PEPL systems were installed prior to 1970, and between 11% and 42% of the pipeline miles on the MRT, EGT, NGPL, and PEPL systems were installed prior to 1950. Therefore, the ability to substitute capacity on some of these relatively older pipelines that could face increasing rates in the future with capacity on a new greenfield pipeline with rates fixed for 20 years is an additional benefit.

---

[19] 151 FERC ¶ 61,047 (2015).

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

4. Operational Considerations

STL Pipeline will interconnect with Laclede's distribution system in north St. Louis County near its on-system storage facility. It is Concentric's understanding from discussions with Laclede that the STL Pipeline will provide deliveries into the distribution system at a pressure high enough to allow for direct injection into Laclede's on-system storage facility under most operating conditions, therefore minimizing compressor usage.

5. Ability to Meet Customer Demand without On-System Propane

Concentric understands that Laclede is retiring its on-system liquid propane facility for a number of reasons. In order to maintain its existing level of citygate deliveries, Laclede must replace the 160,000 MMcf/d (163,200 dth/d) of citygate deliverability its propane facility currently provides. The new capacity on STL Pipeline will allow Laclede to fill that gap in its portfolio. Because Laclede is contracting for 350,000 dth/d of capacity on STL Pipeline (*i.e.*, 186,800 dth/d more than necessary to fill the gap created by retiring its propane facility), Laclede also has the opportunity to reconfigure its existing portfolio for the benefit of customers by not renewing certain existing pipeline capacity while maintaining the same citygate delivery capability.

C. Conclusion

Alternatives to STL Pipeline could provide one or more of the benefits to Laclede's customers discussed above. However, no other pipeline alternative available to Laclede at the time of its decision to contract on STL Pipeline provides all the benefits to customers afforded by STL Pipeline. For example, contracting for or building additional capacity on any existing pipeline path would allow Laclede to fill the gap in its portfolio resulting from retiring its on-system liquid propane facility; however, doing so does not provide the customer benefit of increasing diversity of supplies, but rather simply expands the reliance on the existing supply points. Obtaining greater access to Marcellus/Utica supplies at REX Zone 3 via increased capacity on Laclede's existing pipelines (*e.g.*, MoGas, NGPL to MRT-E, or Trunkline to MRT-E) does not provide the reliability benefits associated with STL Pipeline's new delivery path to Laclede. Concentric is not aware of any pipeline project available to Laclede at the time of its contracting decision that is designed to provide access to significant quantities of REX Zone 3 supplies using a new pipeline path other than STL Pipeline. Therefore, STL Pipeline provides meaningful benefits to Laclede's customers that cannot be provided by another pipeline alternative available to Laclede.

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

SECTION IV:
NUMEROUS FACTORS COULD POTENTIALLY MITIGATE OR ELIMINATE ANY FUTURE RATE IMPACT OF A CAPACITY TURNBACK

A. Introduction

As previously discussed, Laclede requires 163,200 dth/d of the 350,000 dth/d of capacity on STL Pipeline to replace the capacity of its on-system liquid propane facility that will be retired. Therefore, if STL Pipeline is constructed, Laclede could turn back up to 186,800 dth/d of citygate deliverability, assuming the existing amount of such deliverability in Laclede's portfolio is maintained. Based on discussions with Laclede, Concentric understands that MoGas and SSC provide deliveries that are critical for maintaining pressure and serving customer demand on the west side of Laclede's distribution system that cannot be met by deliveries from other existing pipeline supply alternatives in Laclede's portfolio. In addition, Laclede has a long-term contract on MoGas and thus cannot terminate its contractual commitment in the near-term. Therefore, Laclede's existing contractual commitments on MoGas and SSC are not currently candidates for meeting the reduction in contract demand required to maintain Laclede's existing citygate deliverability. As a result, assuming no changes in Laclede's anticipated customer demand and that the existing citygate deliverability is to be maintained, 186,800 dth/d could be reduced from MRT because it is the only other pipeline that provides deliveries directly to Laclede's citygates, and Laclede has contractual commitments on MRT that expire or are terminable in the near term.

As discussed previously, and illustrated in the following map, MRT consists of approximately 1,650 miles of pipe, that includes: (i) the MRT-ML spanning from Louisiana to Missouri (including deliveries to Laclede's citygates); (ii) the MRT-W segment traversing from eastern Texas and connects to the mainline in northern Louisiana, and (iii) the MRT-E segment that runs from central Illinois, with interconnects with multiple pipelines, to Laclede citygates in St. Louis. MRT's total system transportation capacity is approximately 1.7 Bcf/d,[20] which consists of 707,000 dth/d from south-to-north on the MRT-ML, 623,000 dth/d from north-to-south on the MRT-ML, 140,000 dth/d on MRT-W, and 258,000 dth/d on MRT-E.[21] As of the first quarter of 2017, MRT had 58 transportation contracts with 32 shippers for a total 1,663,325 dth/d of transportation capacity.[22] In a first quarter 2017 investor presentation, MRT's parent, Enable Midstream Partners, LP ("Enable Midstream") states that approximately "95% of [MRT's] transportation capacity is under firm contracts."[23]

---

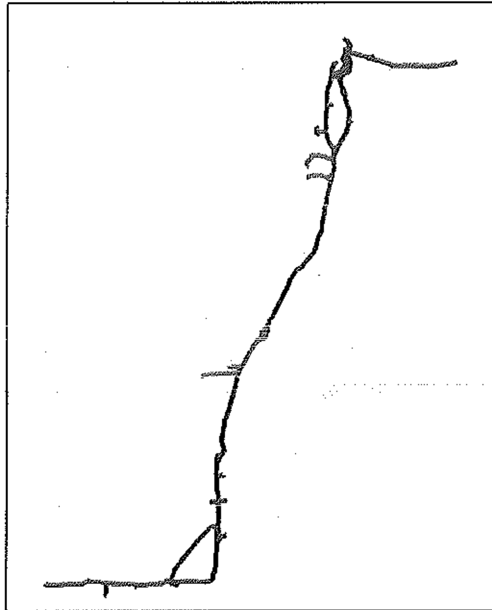
20 Enable Midstream Partners, LP, "Form 10-K," filed: February 21, 2017, for the period: December 31, 2016.

21 MRT Operationally Available Line Capacity, June 26, 2017.

22 MRT Index of Shippers, 2017Q1.

23 Enable Midstream Partners, LP, "First Quarter 2017 Investor Presentation," p. 19.

Figure 4: Map of the MRT System



MRT's two largest customers are Laclede and EGT, an affiliated pipeline of MRT. EGT currently holds 526,218 dth/d of capacity on the MRT-ML (476,218 dth/d deliverability southbound to Perryville; 50,000 dth/d on MRT-W), with 370,830 dth/d of the capacity contracted through March 31, 2024 and the remaining 155,388 dth/d expiring March 31, 2020.[24] Laclede currently holds 640,329 dth/d of capacity on the MRT-ML (490,329 deliverability northbound to Laclede's citygate; 150,000 dth/d deliverability southbound to Field Zone storage) and 170,000 dth/d on MRT-E through two transportation contracts. Therefore, for context, Laclede's potential turnback of up to 186,800 dth/d represents up to 11% of MRT's current contracted capacity.

Considering that Laclede will continue to be a substantial shipper on MRT, potential higher transportation rates resulting from a capacity turnback could offset benefits to Laclede's customers otherwise achieved from contracting for capacity on STL Pipeline. However, it is highly uncertain as to whether a capacity turnback of up to 186,800 dth/d would in fact result in higher transportation rates on MRT due to both market and regulatory factors. Regulatory treatment of capacity turnback is uncertain. In addition, there are a number of potential opportunities that could result in replacement revenues and/or decreased costs to mitigate or eliminate the future rate impact of any capacity turnback, and there is currently no evidence that such measures are not feasible.

B. It is Uncertain Whether All Lost Revenues Due to Capacity Turnback Would be Recoverable in Future Rates

As an initial matter, pursuant to Commission policy, a pipeline has an obligation to develop new business opportunities and market capacity that is unsubscribed or turned back before recovering such costs from its remaining customers:

[24] MRT Index of Shippers, 2017Q1.

> When historic customers terminate service at the end of their contracts it is not appropriate to expect the remaining customers...to pay for all the remaining costs of the pipeline. The pipeline has some obligation to attempt to develop new business opportunities to make use of its unused capacity.[25]
>
> .....
>
> It is clear from the Commission's pronouncements that a pipeline must make a determined effort to remarket turnback capacity to new shippers and new markets and not simply have remaining customers on the system bear the cost consequences thereof.[26]
>
> .....
>
> Every pipeline faces a risk of capacity turnback or unsubscribed capacity when its contracts expire. The Commission has stated that, if such turnback occurs, pipelines have an obligation to attempt to develop new business opportunities to make use of the capacity. The Commission has also encouraged pipelines and their shippers to explore how the costs associated with unsubscribed capacity should be recovered. The Commission has not held that pipelines must necessarily bear the full costs of capacity turnback, but the Commission is mindful of its obligation to protect captive customers and is concerned that captive customers not be required to bear a burdensome portion of costs associated with capacity turnback. The Commission does not guarantee pipelines recovery of costs associated with capacity turnback.[27]

There have been settlements in which costs related to capacity turnback have been shared between a pipeline and its shippers.[28] However, as in any settlement, the end result is a negotiation between the pipeline and its stakeholders resulting in a compromise, thus the outcomes of such settlements do not represent regulatory policy or precedent. While the Commission approved those prior settlements, to Concentric's knowledge, the Commission has never specified a specific policy on the treatment of capacity turnback costs for rate purposes in a litigated proceeding. In fact, in 2006, regarding a capacity turnback risk-sharing mechanism proposed by Gas Transmission Northwest, the Commission specifically stated that it "has not established a general policy or bright-line test regarding risk-sharing mechanisms."[29] Consequently, there is clearly regulatory uncertainty as to whether MRT would be able to recover the costs related to capacity turnback, and if so, the magnitude of such recovery in future rates.

C. Prior Concerns Regarding Potential Capacity Turnback Did Not Materialize

Highlighting the uncertainty surrounding the future rate impact of a potential capacity turnback on MRT is the fact that concerns raised by MRT regarding capacity turnback in the past have not materialized. In its 2001 rate case, MRT was concerned about the amount of contracted capacity that

---

[25] *El Paso Natural Gas Company*, 72 FERC ¶ 61,083 (1995).

[26] *El Paso Natural Gas Company*, 84 FERC ¶ 63,004 (1998).

[27] *Mississippi River Transmission Corp.*, 95 FERC ¶ 61,460 (2001).

[28] *See, e.g., Transwestern Pipeline Co.*, 72 FERC ¶ 61,085 (1995); *El Paso Natural Gas Company*, 79 FERC ¶ 61,028 (1997).

[29] *Gas Transmission Northwest Corp.*, 117 FERC ¶ 61,315 at P 79 (2006).

was to expire in the near-term combined with the competition from NGPL's proposed 300,000 dth/d lateral to the outskirts of St. Louis. As part of that rate case, MRT proposed a capacity turnback mechanism to share the costs of potential capacity turnback between shippers and shareholders resulting from competing projects. The Commission rejected MRT's proposed capacity turnback mechanism, noting that "the proposal is predicated entirely on speculation of what its customers may do over the next several years when their contracts expire."[30] Ultimately a settlement was reached whereby the parties agreed to a 5-year rate moratorium, with the exception that MRT would have the right to file a rate case if northbound contracted capacity dropped below 92% of then current levels.[31] MRT never exercised the rate filing moratorium exception and did not file a rate case until 2012, which suggests that the anticipated capacity turnback was sufficiently mitigated.

Notably, in its 2012 rate case, MRT was also concerned with the potential turnback of capacity on its system. In that instance, however, the concern was a result of capacity held by its affiliate, EGT. EGT had previously contracted for a significant amount of capacity on MRT to connect the eastern portion of EGT's system with pipeline capacity that it had in the Perryville area. As MRT noted in 2012, "the only practicable way for CEGT [*CenterPoint Energy Gas Transmission, now known as EGT*] to reach its facilities at Perryville was through MRT;"[32] however, similar to Laclede with STL Pipeline in the current circumstance, EGT constructed its 1.55 Bcf/d pipeline known as Line CP that could bypass the need to utilize MRT southbound capacity to Perryville. At the time of the 2012 rate case, MRT indicated that EGT had already turned back 125,000 dth/d on MRT due to softening market conditions and MRT was concerned about losing the remainder of the EGT contracted capacity through bypass on Line CP.[33] MRT's 2012 rate case was settled and the firm southbound contracts of MRT's affiliate remained on the system at a discount as set forth in the settlement agreement, and continue to remain on the system.[34]

Even with the now current concerns of capacity turnback, MRT's parent has recently highlighted the incremental sales of capacity on MRT. In a May 3, 2017 presentation supporting its first quarter 2017 financial results, Enable Midstream reported an increase in interstate firm contracted capacity compared to the first quarter of 2016, in part due to "incremental capacity contracted on Enable Mississippi River Transmission, LLC".[35]

---

30 *Mississippi River Transmission Corporation*, 95 FERC ¶ 61,141 (2001).

31 *Mississippi River Transmission Corporation*, 97 FERC ¶ 63,027 (2001).

32 Exhibit MRT-90, Prepared Direct Testimony of Robert A. Trost, Docket No. RP12-955-000, August 22, 2013, p. 13; [clarification added].

33 *Id.*

34 *Enable Mississippi River Transmission, LLC*, 144 FERC ¶ 61,230 (2013); Exhibit No. MRT-91, Prepared Direct Testimony of Robert A. Trost, Docket No. RP12-955-000, August 22, 2013; MRT Index of Shippers, 2017Q1. At the time of MRT's 2012 rate case, MRT's affiliate, CEGT, held firm southbound capacity of 470,830 dth/d, and as noted previously, MRT's affiliate currently holds 476,218 dth/d of firm southbound capacity, or slightly more capacity than at the time of MRT's 2012 rate case. In addition, the terms of the CEGT contracts (now EGT) have been extended to 2020 and 2024, when previously the expirations for CEGT's contracts were in 2015 and 2020.

35 Enable Midstream Partners, LP, "First Quarter 2017 Conference Call," May 3, 2017, p. 21.

D. Potential for Replacement Revenues through Enhanced Bi-directional Capability

It has been widely reported that multiple pipelines that were originally built to bring natural gas supplies from the Gulf Coast and Mid-continent production areas to market centers located throughout the country have been and are continuing to reverse their traditional south-to-north and/or west-to-east flows. These reversals serve as an outlet for substantially increased supplies from the Marcellus and Utica basins to serve growing industrial and electric generation demand, LNG exports, and exports to Mexico:

> Of all the demand markets in the U.S., the biggest prize eyed by Marcellus/Utica natural gas producers is the Gulf Coast region, where a combination of industrial demand, LNG exports and power generation projects is driving a need for more and more gas. And beyond the U.S. Gulf Coast states, there lies still another market capable of gobbling up even more of the excess Northeast gas supply: Mexico's rapidly growing gas-fired generation sector – that is, assuming pipelines in Texas can get it all the way there.[36]
>
> Plans for LNG export terminals, petrochemical plants and gas-fired power generation along the Gulf Coast have made it the #1 target market for Marcellus/Utica natural gas producers. At the same time, these demand projects along the coast, from the Southeast, Texas, and even farther down in Mexico, are counting on more supply growth from Appalachia. Since 2014, close to 5.0 Bcf/d of southbound pipeline capacity has been added and another 4.0 Bcf/d is due by early 2019.[37]

MRT's parent Enable Midstream has also noted the favorable demand outlook in the Gulf region, citing over 14 Bcf/d of expected growth from south central, southeast, and Gulf coast demand plus LNG exports over the next 10 years.[38]

Each of the projects listed in the following figure relate to pipelines that have traditionally flowed gas from the Gulf Coast to midwestern and northeastern markets but involve reversing those pipeline's traditional flow direction to bring gas produced in the north to demand in the Gulf region. As demonstrated in the table, over 5.3 Bcf/d of pipeline reversals have already come online, and an additional 4.8 Bcf/d is expected to come online in the near term for a total of over 10 Bcf/d of pipeline reversals designed to bring additional supplies to the Gulf region.

[36] RBN Energy, "Too Much Pipe On My Hands?? – Marcellus/Utica Takeaway capacity to the Gulf Coast," August 8, 2016.

[37] RBN Energy, "In a Northeast Minute... Everything Can Change – Marcellus/Utica Takeaway Projects to the Gulf Coast," May 29, 2017.

[38] Enable Midstream Partners, LP, "First Quarter 2017 Investor Presentation," p. 7.

Figure 5: Examples of In-Service and Proposed Pipeline Reversals Serving the Gulf Region[39]

Pipeline	Project	Size (MMcf/d)	Status	From/To
TETCO	TEAM South	300	In Service	PA to MS
Tennessee	Utica Backhaul	500	In Service	PA to LA
TETCO	OPEN	550	In Service	OH to LA
NGPL	Gulf Coast mainline	750	In Service	IL to Gulf Coast
ANR	Southeast Main Line	2,000	In Service	IN to Gulf Coast
Texas Gas Transmission	Ohio-Louisiana Access Project (OLAP)	400	In Service	OH to LA
Tennessee	Broad Run Flexibility	590	In Service	OH to LA/MS
Tennessee	Broad Run Expansion	200	Expected In Service June 2018	WV to LA/MS
TETCO	Gulf Markets Expansion Phase I	250	In Service	Marcellus/ Utica to LA
TETCO	Access South	320	Expected In Service Nov. 2017	PA to LA/ MS
Texas Gas Transmission	Northern Supply Access Project	284	Expected In Service Mar. 2017	OH to LA
Tennessee	Southwest Louisiana Supply Project	900	Expected In Service Feb. 2018	OH to LA
Columbia Gas/ Gulf	Leach/Rayne Xpress	1,500/ 1,050	Expected In Service Nov. 2017	Marcellus/ Utica to LA
Columbia Gulf	Gulf Xpress	875	Expected In Service Nov. 2018	Marcellus/ Utica to LA
TETCO	Gulf Markets Expansion Phase II	400	Expected In Service Aug. 2017	Marcellus/ Utica to LA
Panhandle/ Trunkline	Backhaul Project (part of Rover)	750	Expected In Service 2017/2018	Marcellus/ Utica to LA

These pipelines have recognized that significant opportunity exists in taking advantage of bi-directional capability to not only serve demands in the north, but to capture market demand in the south as well.

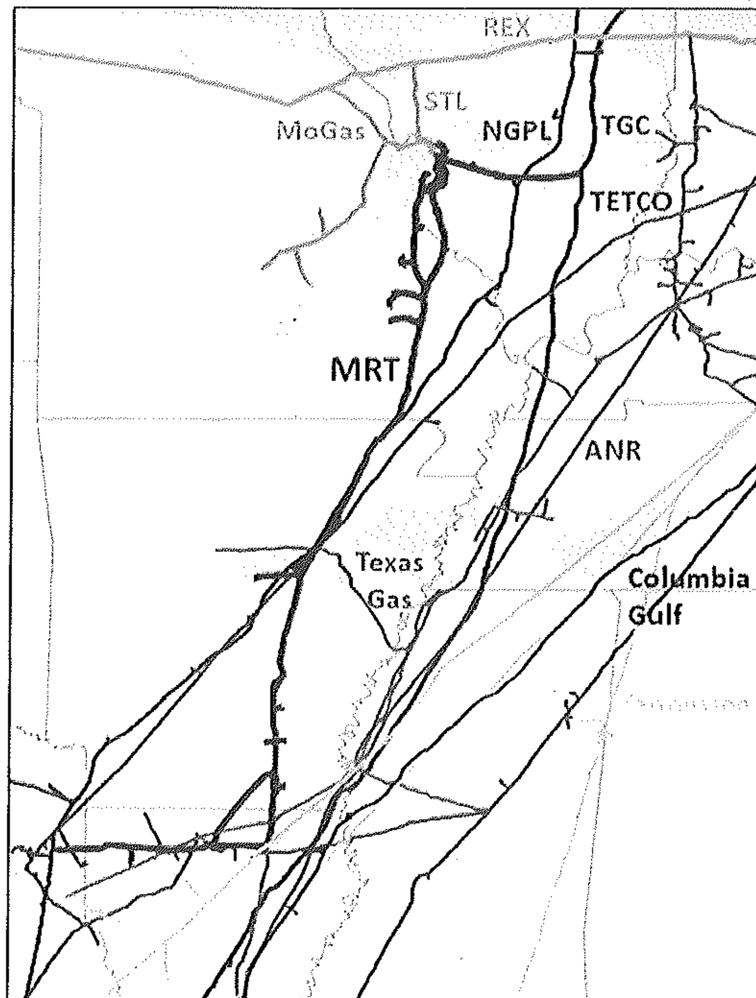
> It is clear what is happening here. Encouraged by Marcellus/Utica gas production forecasts and strong responses to open seasons, midstream companies with existing pipeline assets in and/or near the Marcellus/Utica are considering every possible

[39] RBN Energy, "They long to Be Close to You – The Marcellus/Utica Push to Reverse Gas Pipelines," June 2, 2014; RBN Energy, "Too Much Pipe On My Hands?? – Marcellus/Utica Takeaway capacity to the Gulf Coast," August 8, 2016; RBN Energy, "In a Northeast Minute… Everything Can Change – Marcellus/Utica Takeaway Projects to the Gulf Coast," May 29, 2017.

way to make better and fuller use of what they have by adding bi-directionality and capacity. The combined effect is extraordinary, with more than 9 Bcf/d of new takeaway capacity now under development and the potential for a few more Bcf/d of takeaway capacity on deck.[40]

As shown in the following map, MRT is well-situated in the Midwest-to-Gulf Coast corridor for the potential to increase the transportation of gas from north to south. MRT has a similar footprint to many of the pipelines that have projects to reverse flow and has numerous pipeline interconnects in the north that could be expanded to access Marcellus/Utica gas (*e.g.*, NGPL, Trunkline, STL Pipeline if constructed).

Figure 6: Map of MRT and Other Interstate Pipelines in Same Region that Have Reversed Flow

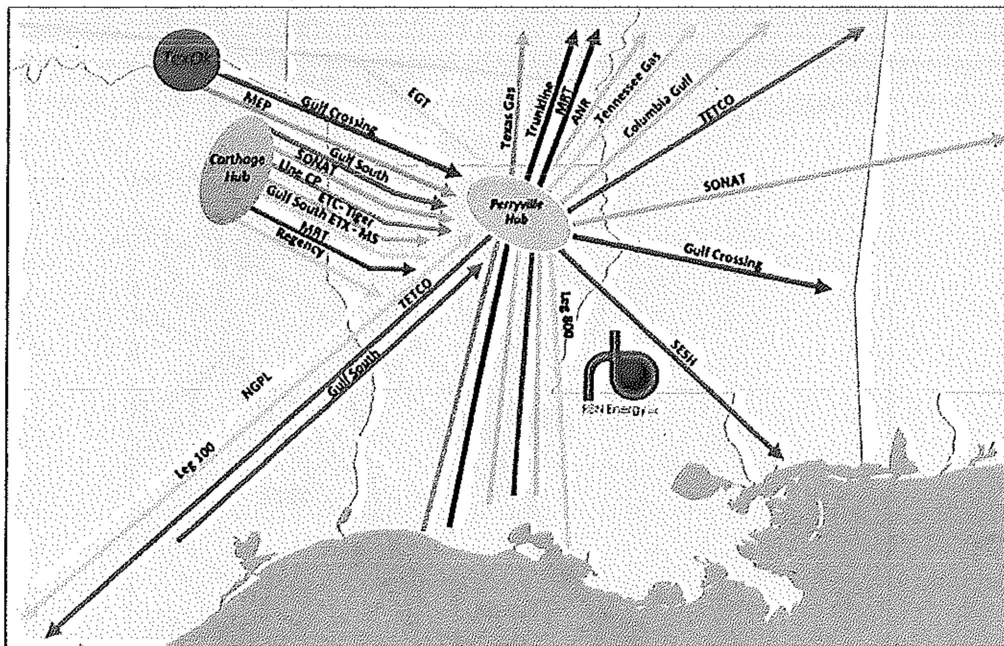


[40] RBN Energy, "They long to Be Close to You – The Marcellus/Utica Push to Reverse Gas Pipelines," June 2, 2014.

While some of the Gulf area demands may be located beyond MRT's direct footprint, as shown in the following figure, MRT has a direct connection to the desirable Perryville Hub, along with the ability to access numerous other pipelines.

> One of the touchstones of a successful trading hub is optionality, and Perryville has no shortage of that. For one, it is a highly connected, high-capacity hub. For another, its location gives it just about 360-degree access to supply regions.... The multitude of interconnects allow gas to hop from one pipeline to the other on its way from supply to demand market areas, changing direction along the way if need be.[41]

Figure 7: Perryville Hub Layout and Historical Flows[42]



In addition, the specific benefit of allowing Marcellus/Utica gas to access Perryville Hub has been noted:

> Now, in the context of the production growth out of the Marcellus/Utica, of course, supply is increasingly moving southbound and displacing and/or reversing gas on pipelines headed out of Texas and Midcontinent toward the Perryville area. On the other hand, Perryville's connectivity and location also make it an ideal axis point for Marcellus/Utica gas headed south/southwest to demand centers, including LNG export terminals, power plants and industrial plants along the Gulf Coast, in Texas and even in Mexico. In that sense, the Perryville Hub looks to be poised to assume a much more important role in the U.S. natural gas universe.[43]

---

[41] RBN Energy, "Turn the World Around – The Pivotal Role of the Perryville Hub in Transforming U.S. Natural Gas Flows," November 15, 2016.

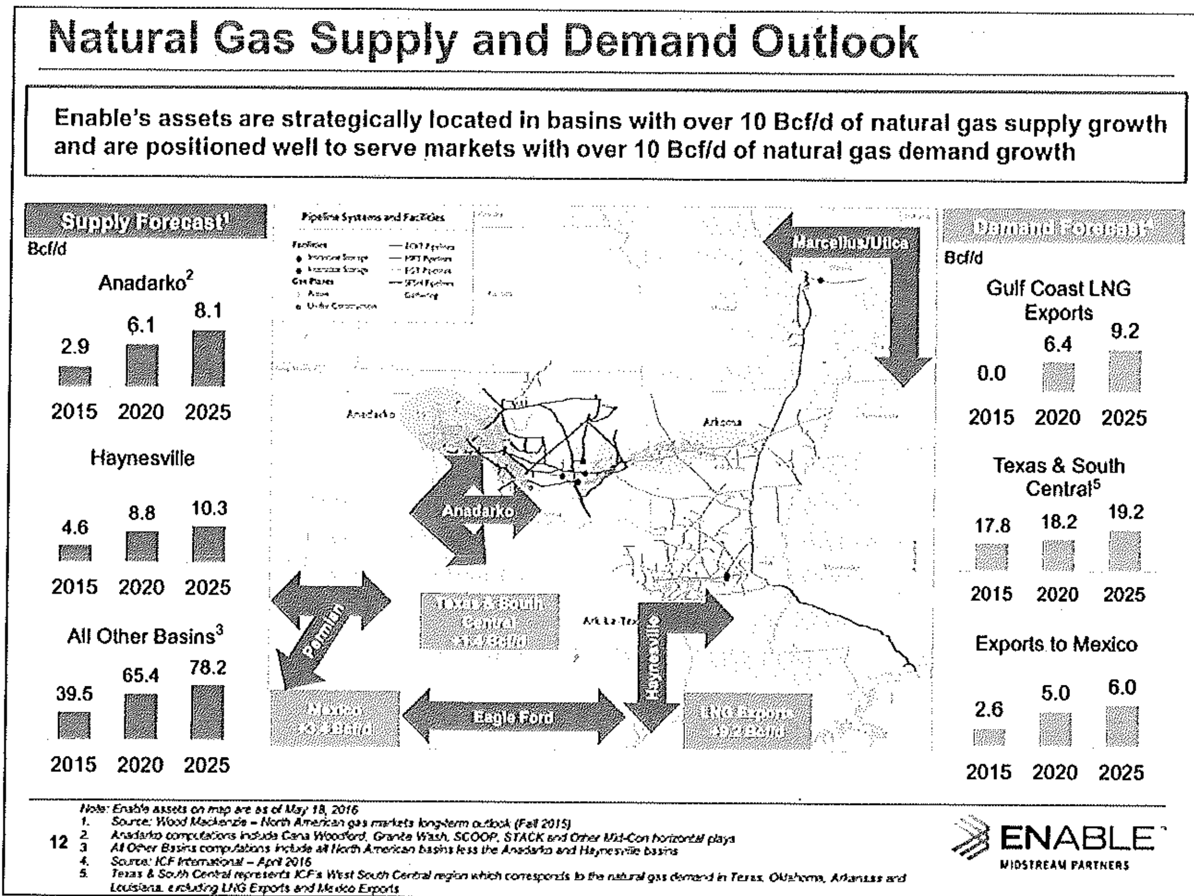
[42] *Id.*

[43] *Id.*

Enable Midstream has also highlighted the benefits of MRT's access to the Perryville Hub, stating that MRT could access "almost every major consuming market east of the Mississippi River through Perryville Hub and associated trading points."[44]

Concentric recognizes that facility additions may be required to effectuate increased bi-directional capability on MRT to access and transport Marcellus/Utica gas; however, we are unaware of any evidence that would preclude the reversal of MRT. In fact, as shown in the following figure, Enable Midstream has previously touted the benefits of transporting Marcellus/Utica gas west and south on MRT as part of its outlook for investors.[45]

Figure 8: Enable Midstream View of MRT Strategic Opportunities



Furthermore, Enable Midstream has indicated on investor calls that it believes MRT is a strategic asset with the opportunity for alternative contracting and use of the system in the event of a capacity turnback by Laclede:

> [*Rod Sailor*] Well, again, I think first and foremost, we think we're still advantaged into that market. There are other players along that system that, if we had the capacity

[44] Enable Midstream Partners, LP, "Fourth Quarter 2016 Investor Presentation," p. 17.

[45] Enable Midstream Partners, LP, "MLPA 2016 Investor Conference," June 3, 2016, p. 12.

that potentially could -- we could re-contract there. So I think -- and then also I'd say that parts of that system are bidirectional, and there are ways that we could potentially utilize that to move gas in a different direction. So we think that's still a very strategically placed piece of pipe, as we think about gas flows coming, both up from the Gulf, and down from the east.[46]

.....

[*Rod Sailor*] ... candidly, we think that our MRT system is very well positioned to potentially take advantage of moving Marcellus gas south. And so, again, we think that there are probably opportunities for us to explore related to that, clearly that system currently serves Laclede. And – but we do think, as I said that there will be other opportunities, again, if there is significant Marcellus gas getting landed in St. Louis for us to potentially think about ways we can use I think a very strategic piece of pipe."[47]

.....

[*Christopher Ditzel*] I think, Rod, you're right that project represents kind of a change and increase in the flexibility of the MRT system that provides more access to gas supply and other – from other parts of the country and also ties that supply to the – or Perryville Hub on the EGT system, so we see a lot of opportunity around that. We do have some contract expirations coming up on MRT for Laclede, but that's a kind of a normal re-contracting process.[48]

Increased bi-directional capability on MRT to serve growing demand in Gulf area markets with supplies produced in the Marcellus/Utica area could mitigate any rate effects of potential turnback capacity associated with Laclede's STL Pipeline contract by replacing existing volumes with flows from north-to-south. Also, additional north-to-south capability may allow MRT to extract increased value from existing southbound contracts that are currently provided at a discounted rate. Moreover, as mentioned by Enable Midstream executives, the additional deliveries of Marcellus/Utica supplies delivered to MRT by STL Pipeline could help facilitate a reversal project on MRT by providing access to additional gas supplies on the northern end of its system.

E. Potential for Replacement Revenues through Increased Future Natural Gas Demand Near the MRT Footprint

Increased regional demand from natural gas-fired generation or other industrial sources may provide an opportunity for MRT to mitigate the impact of any capacity turnback associated with Laclede. Numerous coal and nuclear power plants around the nation have been shutting down due to ongoing environmental and/or economic concerns. While some of this capacity will be replaced

---

[46] Thomson Reuters Streetevents, "Edited Transcript: ENBL – Q1 2016 Enable Midstream Partners LP Earnings Call," May 4, 2016.

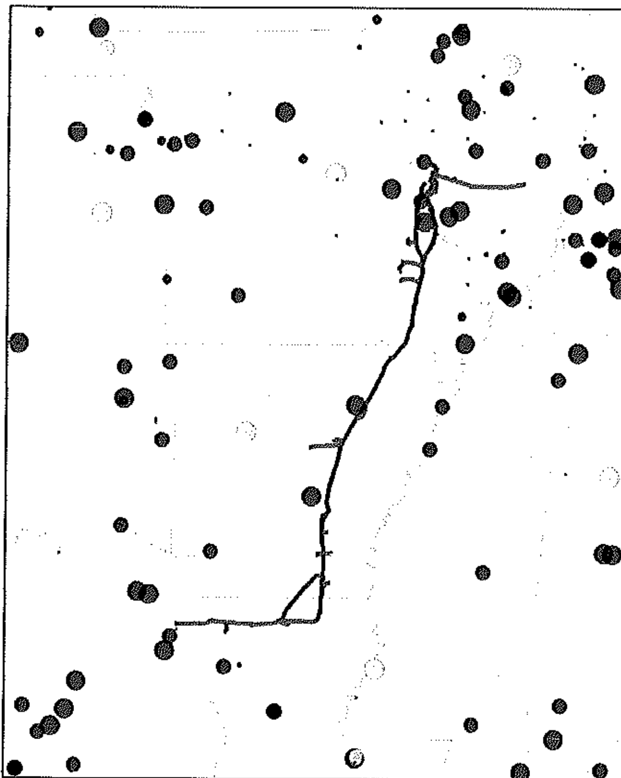
[47] Seeking Alpha, "Enable Midstream Partner's (ENBL) Q4 2015 Results – Earnings Call Transcript," Feb 17, 2016.

[48] Seeking Alpha, "Enable Midstream Partner's (ENBL) Q4 2015 Results – Earnings Call Transcript," Feb 17, 2016.

with renewable power sources, such as wind and solar, these intermittent renewable resources require substantial back-up, which is often provided by increased natural gas-fired plants. As a result, it is expected that gas demand from natural gas-fired power plants will continue to increase.

As shown in the following map, there are numerous coal and nuclear power plants near MRT. In their annual planning document, the Midcontinent Independent System Operator ("MISO"), which operates the electric transmission system in and around MRT's footprint, has estimated 12.6 GW of coal retirements in their "business as usual case", plus an additional 14 GW and 20 GW of coal retirements in other scenarios, and identifies natural gas, wind and solar generation as expansions to replace the coal retirements.[49]

Figure 9: Map of MRT and Coal (Black) and Nuclear (Yellow) Fired Power Plants



The potential future demand opportunity associated with coal retirements and increased natural gas-fired generation has also been highlighted by Enable Midstream as a benefit when speaking with investors:

- Enable is well positioned to capture additional demand with over 45 coal-fired plants located within a 50-mile radius of our pipelines
- Within a 50-mile radius are another 60+ units totaling 6+ Bcf/d of gas fired capacity that is not connected to Enable.[50]

[49] Midcontinent Independent System Operator, "MTEP16, MISO Transmission Expansion Plan," p. 98.

[50] Enable Midstream Partners, LP, "First Quarter 2015 Conference Call," May 6, 2015, p. 11.

20170714-5226 FERC PDF (Unofficial) 7/14/2017 4:50:47 PM

While it is not possible at this juncture to determine the impact that such changes in natural gas demand may have on MRT, as its parent has recognized, the potential exists for future gas-fired generation demands to eliminate or mitigate any potential rate impact that may otherwise be associated with a turnback of capacity.

F. Potential to Decrease System Costs

If MRT is unable to re-contract all or a portion of turn backed capacity, MRT may be able to reduce its costs through either mothballing and/or abandoning certain facilities on its system to rationalize the capability of its system with the ongoing demand for its capacity. This is an approach that other pipelines have taken when faced with similar circumstances. For example:

- In 2001, Trunkline proposed to abandon by sale to an affiliate a portion of its mainline with a capacity of 255,000 dth/d because it had been underused on an annual basis and there was no long-term market for its services at its maximum rates. Trunkline estimated that removing the facilities would decrease its then-current maximum transportation rates. In approving the abandonment, the Commission stated that:

  > Where continued gas service will not be jeopardized, the Commission has exercised its abandonment authority to permit an interstate pipeline to rationalize its gas plant and operations for various business reasons. Thus, the Commission has authorized a pipeline to remove and replace deteriorated or superfluous facilities or to sell gas transmission facilities to an affiliate for non-NGA jurisdictional gas distribution, the transportation of crude oil or, as planned here, oil products.[51]

  In its decision, the Commission noted that the dominant sources of gas supply into the Midwest had diversified from the offshore areas traditionally served by Trunkline, which is the same circumstance that again is currently underway in the Midwest with customers such as Laclede looking to increase access to substantial shale supplies from the Marcellus and Utica basins. In approving Trunkline's abandonment, the Commission found that no firm shippers would be deprived of transportation service, and that the Commission will not require a pipeline to retain unneeded jurisdictional facilities.

- In 2007 and 2008, Northern Natural Gas Company ("Northern") was authorized to abandon by sale portions of its Field Area pipeline facilities in Texas, Oklahoma and Kansas to two different parties.[52] In one case, Northern indicated that the abandonment was critical to the pipeline and its shippers in order to reduce the costs in the Field Area since it had experienced a significant loss of transportation revenue on that portion of its system, noting that customers would benefit from the reduction in the need for future capital expenditures as well as ongoing operating costs. Northern estimated that the sale of the facilities to Cimarron would decrease rates by approximately 3.3%, while the sale of the facilities to WTG Hugoton would reduce rates by approximately 4.0%.

---

51 *Trunkline Gas Company*, 94 FERC ¶ 61,381 (2001); footnotes omitted.

52 *Northern Natural Gas Company and WTG Hugoton, LP*, 119 FERC ¶ 61,035 (2007); *Cimarron River Pipeline, LLC and Northern Natural Gas Company*, 124 FERC ¶ 61,069 (2008).

- In 2010, El Paso was authorized to abandon two underutilized and obsolete compressor stations on its system that reduced the capacity on its South Mainline by 220,000 dth/d.[53] Over challenges from various parties, the Commission authorized the abandonment of these facilities noting that the abandonment would enable El Paso to avoid future capital costs and expenses without having an adverse impact on current firm shippers. In its decision, the Commission also noted that El Paso held an open season and received no customer bids on the available capacity, which supported that there would be no future impact on the pipeline's provision of firm transportation service.

G. Conclusion

There are numerous opportunities to increase revenues and/or decrease costs that may allow MRT to partially or fully mitigate any rate impact associated with a potential capacity turnback of up to 186,800 dth/d. Currently, it is highly uncertain whether capacity that is turned back on MRT would result in a rate increase. It is also unclear as to the extent of such an increase, as there are many other factors that would influence the ultimate rate level, including future regulatory and/or settlement outcomes that cannot be known at this time. While there is no way to know the exact circumstances that will face MRT at the point in the future when it may face decontracting risk, there are many potential opportunities that have been used by other pipelines to resell or repurpose turned back capacity to mitigate and/or eliminate the need for a rate increase. It is, thus, premature to conclude that a potential turnback of capacity by Laclede would result in any, much less a significant, rate impact to MRT's shippers.

[53] *El Paso Natural Gas Company*, 136 FERC ¶ 61,180 (2011).

WWW.CEADVISORS.COM

Schedule EDF-03

Schedule EDF-03: Proposed Modifications to Purchased Gas Adjustment/Actual Cost Adjustment Tariff

A Current Purchased Gas Adjustments

In the event of increases or decreases in the cost of purchased gas, charges for gas service contained in the Company's then effective rate schedules on file with the Missouri Public Service Commission (Commission), with the exception of the Large Volume Transportation and Sales Service ("LVTSS") and Vehicular Fuel ("VF") rate schedules, shall be increased or decreased at the times provided in Section E by a Current Purchased Gas Adjustment ("CPGA"). The CPGA for sales made pursuant to the LVTSS and VF rate schedules shall be determined and implemented on a monthly basis, as described in paragraph 5 below, and shall be calculated in conformance with the CPGA for other firm sales rate schedules, except where noted. With the exception of purchased gas which was delivered to the Company though capacity contracted for between the Company and a Company affiliate, tThe cost of purchased gas shall include but not be limited to all charges incurred for gas supply, pipeline transmission and gathering and contract storage. For all purchased gas which was delivered to the Company though capacity contracted between the Company and a Company affiliate, charges incurred for gas supply, pipeline transmission and gathering and/or contract storage shall be subject to Clause A-1 of Sheet [ ].

Proposed New Section A-1

A-1. This Section A-1 pertains to recovery of costs for gas supply and capacity reservation charges related to gas supply purchased by the Company and transported through capacity contracted for by the Company under one or more agreements with a Company Affiliate. To the extent there are capacity reservation charges identified by the Company for which recovery is sought pursuant to the CPGA the results of the calculations set forth in this Section A-1 will be considered Commodity Related Charges and added to those charges set forth in paragraph c. of Sheet 16-a.

A. Definitions:

Propane Replacement Capacity is that capacity (if any) which replaces Company capacity previously provided by the Company's propane-air assets.

Supply Reliability Capacity is that capacity (other than Propane Replacement Capacity) which is pipeline capacity which directly connects to the Company's distribution and/or storage facilities.

Supply Diversity Capacity is that capacity which either: (a) connects to a pipeline not owned by an affiliate which pipeline directly connects to a pipeline directly connected to the Company or (b) is deemed by Commission Order to be considered Supply Diversity Capacity for the purpose of this Section A-1.

B. Calculation of Commodity Related Charges.

1. All gas supplies purchased by Company, transported through capacity contracted for by Company under one or more agreements with a Company Affiliate and sold by Company will be considered Commodity Related Charges and added to those charges set forth in paragraph c. of Sheet 16-c.
2. Those capacity reservation charges associated with Propane Replacement Capacity will be considered Commodity Related Charges to the extent the Company's peaking propane assets are retired and there is a positive difference between (a) and (b) below (i.e., (a) minus (b))
    a) the Commission determined all-in cost of the retired [or replacement] Propane Replacement Capacity (including cost of operations, maintenance, allowed return and return related taxes) plus the cost of a design winter quantity of propane, and
    b) the average cost of an energy equivalent amount of natural gas received by Company between November of one year and March of the succeeding year which amount of energy equivalent is equal to the design winter quantity of propane.
3. Those capacity reservation charges associated with Supply Reliability Capacity which Supply Reliability Capacity replaces capacity contracted by Company from Enable Mississippi River Transmission (MRT) (i.e., MRT Replacement Capacity) as of the effective date of this Section A-1 will be considered allowed capacity reservation charges up to the amount in dollars per Dth per day of the then effective rate of the MRT Replacement Capacity in dollars per Dth per day.
4. Those capacity reservation charges associated with Supply Reliability Capacity which Supply Reliability Capacity replaces capacity contracted by Company from MRT as of the effective date of this Section A-1 which are in excess of amounts recovered under A-1 3. will be considered Commodity Related Charges to the extent there is a positive difference between (a) and (b) below (i.e., (a) minus (b)):
    a) The FOM Benchmark price per Dth (as set forth in the GSIP section of this Tariff) each month times the quantity of gas purchased by Company and sold by Company each month which is transported through the MRT Replacement Capacity; and
    b) The actual cost of gas purchased by Company and sold by Company each month which is transported through the MRT Replacement Capacity; provided such difference per Dth does not exceed the total amount per Dthd of the Supply Reliability capacity that replaced the MRT Supply Reliability Capacity.
        i. Any excess or deficiency dollars as compared to Company paid capacity reservation charges versus company recovered amounts in Section B.3 and B.4 above will be placed in a Schedule A-1 Deferred Account to be used

within five (5) years of such dollars being placed in the A-1 Deferred Account.

5. Those capacity reservation charges associated with Supply Diversity Capacity will be considered Commodity Related Charges to the extent there is a positive difference between (a) and (b) below (i.e., (a) minus (b)):
    a) The FOM Benchmark price per Dth (as set forth in the GSIP section of this Tariff) each month times the quantity of gas purchased by Company and sold by Company each month which is transported through the Supply Diversity Capacity; and
    b) The actual cost of gas purchased by Company and sold by Company each month which is transported through the Supply Diversity Capacity; provided such difference per Dth does not exceed the total amount per Dthd of the Supply Diversity Capacity.
        i. Any excess or deficiency dollars as compared to Company paid capacity reservation charges versus company recovered amounts in Section 5 above will be placed in a Schedule A-1 Deferred Account to be used within five (5) years of such dollars being placed in the A-1 Deferred Account.

Schedule EDF-04

Schedule EDF-04: Proposed Modifications to the Gas Supply Incentive Plan

Modifications are presented below in redline.

D. Gas Supply Incentive Plan

For purposes of reducing the impact of upward natural gas commodity price volatility on the Company's customers and to share in the benefit of negotiated interstate pipeline discounts, a Gas Supply Incentive Plan (GSIP) shall be established in which the Company shall have the opportunity to share in price reductions earned by the Company in the acquisition of natural gas commodities and pipeline capacity.

The GSIP recognizes that the Company, through various purchasing and negotiating strategies may be able to acquire supplies of natural gas for its on-system customers at levels below an established benchmark price or obtain pipeline transportation or storage capacity at less than maximum rates. If the Company can acquire natural gas commodity prices below the benchmark or negotiate pipeline discounts below the maximum rates approved by the Federal Energy Regulatory Commission (FERC), then it will have the opportunity to retain a portion of the associated savings.

The GSIP does not apply to any gas supply, gas supply costs, or costs of transportation which are subject to Section A-1 of the Purchased Gas Adjustments Section of this Tariff during any period in which there is any negative amount in the Section A-1 Deferred Account. To the extent there is a positive amount in the Section A-1 Deferred Account, the Company may transfer some or all of such positive amount to the Incentive Revenue Account referenced below.

1. Commodity Savings. The GSIP applies to the total commodity cost of natural gas supplies purchased for on-system consumers divided by actual purchase volumes for on-system customers, ("Net Commodity Gas Price"), for all volumes purchased by the Company for on -system resale during the Company's October through September ACA period. The Company shall retain in an Incentive Revenue (IR) Account a portion of certain cost reductions the Company realizes in connection with the acquisition and management of its gas supply portfolio.

. . .

Schedule EDF-05

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

The Staff of the Missouri Public Service Commission, Complainant, v. Laclede Gas Company, Respondent.	)))))))	Case No. GC-2011-0098
In the Matter of Laclede Gas Company's Purchased Gas Adjustment (PGA) Factors to be Audited in its 2004-2005 Actual Cost Adjustment	)))	Case No. GR-2005-0203
In the Matter of Laclede Gas Company's Purchased Gas Adjustment for 2005-2006	))	Case No. GR-2006-0288
In the Matter of Laclede Gas Company's Purchased Gas Adjustment for 2006-2007	))	Case No. GR-2008-0140
In the Matter of Laclede Gas Company's Purchased Gas Adjustment for 2007-2008	))	Case No. GR-2008-0387
In the Matter of Laclede Gas Company's Purchased Gas Adjustment for 2008-2009	))	Case No. GR-2010-0138
In the Matter of Laclede Gas Company's 2009-2010 Actual Cost Adjustment Filing	))	Case No. GR-2011-0055
In the Matter of Laclede Gas Company's 2010-2011 Actual Cost Adjustment Filing	))	Case No. GR-2012-0133

UNANIMOUS PARTIAL STIPULATION AND AGREEMENT
AND WAIVER REQUEST
AND REQUEST FOR APPROVAL OF COST ALLOCATION MANUAL

Beginning in December 2006 and continuing through December 2012, the Staff raised various issues and concerns in its Actual Cost Adjustment ("ACA") recommendations in Case Nos. GR-2005-0203, GR-2006-0288, GR-2008-0140,GR-2008-0387, GR-2010-0138, GR-2011-0055, and GR-2012-0133 regarding some or all of

the following: (a) transactions between Laclede Gas Company ("Laclede" or "Company") and its marketing affiliate Laclede Energy Resources ("LER"), (b) Laclede's pursuit of overcharges from MoGas Pipeline ("MoGas"), (c) Laclede's treatment of estimates of Lange underground storage non-recoverable gas, and (d) other matters which had no specific corresponding monetary adjustment recommendation.

On October 6, 2010, the Staff also filed a complaint Case No. GC-2011-0098 against Laclede (the "Complaint Case") in which it asserted that the Company had violated the Commission's affiliate transaction rules ("Rules") 4 CSR 240-40.015 and 4 CSR 240-40.016 because: (a) the Company had allegedly failed to obtain Commission approval for its Cost Allocation Manual ("CAM"); (b) the CAM's treatment of gas supply affiliate transactions was allegedly inconsistent with the asymmetrical pricing standards set forth in the Rules; and (c) Laclede had allegedly failed to file the CAM on an annual basis. On December 10, 2010, Laclede filed a counterclaim in this case alleging that Staff had violated the Commission's good faith pleading rules by taking a position, contrary to the Commission's Affiliate Rules, that marketing affiliates should be prohibited from earning a profit on gas supply transactions with affiliated utilities.

Laclede, the Staff, and the Office of the Public Counsel ("OPC") (hereinafter collectively referred to as "the Parties") have met on several occasions in an effort to resolve certain issues in these proceedings. As a result of their discussions, the Parties recommend that the Commission approve the following stipulations and agreements resolving all issues in the Complaint Case and all issues relating to transactions between Laclede and its affiliates in Case Nos. GR-2005-0203, GR-2006-0288, GR-2008-0140, GR-2008-0387, GR-2010-0138, GR-2011-0055, and GR-2012-0133.

This Unanimous Partial Stipulation and Agreement does not include any issues, matters, cases or claims whatsoever, other than as specifically set forth herein, and specifically does not include Laclede's pursuit of overcharges from MoGasorLaclede's treatment of estimates of Lange underground storage non-recoverable gas, or any matters on appeal as a result of the cases addressed by this Unanimous Partial Stipulation and Agreement, or any other Commission case not addressed by thisUnanimous Partial Stipulation and Agreement. Furthermore, this Unanimous Partial Stipulation and Agreement does not include, nor is it intended to affect in any manner, Case No. 11AC-CC00320 which is currently pending in Cole County, Missouri, or any appeals thereof or any actions arising therefrom relating to the pursuit or enforcement of the Commission's remedies; nor shall this Unanimous Partial Stipulation and Agreement be interpreted to preclude or render moot any argument or remedy which might otherwise be made or awarded in Case No. 11AC-CC00320 in the absence of this Unanimous Partial Stipulation and Agreement.

1. To address Staff's and OPC's position that utilities should operate pursuant to a Commission-approved CAM, the Parties agree and recommend that the Commission approve Laclede's revised CAM contained in Appendix 1 to this Unanimous Partial Stipulation and Agreement[1]. Such recommendation is being made by Laclede solely for purposes of resolving the Complaint Case and should not be construed as any kind of modification of Laclede's position that its CAM previously satisfied

[1]Upon the closing of the transaction currently being addressed in Case No. GM-2013-0254and Commission approval of this Unanimous Partial Stipulation and Agreement, the CAM contained in Appendix 1 and the Gas Supply and Transportation Standards of Conduct set forth in Appendix 2 to this Unanimous Partial Stipulation and Agreement shall apply to both the Laclede and MGE Divisions of Laclede Gas Company.

whatever legal requirements were necessary to make it a valid instrument for governing how Laclede's affiliate transactions should be conducted.

2. To address Staff's and OPC's position that utilities should file their CAMs on an annual basis, provisions have been added to pages 1 and 2 of the CAM which would require Laclede to file all current and future versions of the CAM in EFIS, together with email alerts to Staff and OPC whenever there is a change in the CAM. Laclede would also continue to file in EFIS its annual CAM report detailing its affiliate transactions for the preceding fiscal year in accordance with the timeline previously approved by the Commission in Case No. GE-2011-0171.

3. To address Staff's and OPC's concerns regarding how the purchase and sale of gas and transportation capacity between Laclede and its affiliates should be conducted and priced, the Parties recommend that the Gas Supply and Transportation Standards of Conduct[2] set forth in Appendix 2 be approved by the Commission, subject to Laclede's request for a variance and/or waiver from certain Affiliate Transaction Rule requirements pertaining to "fully distributed cost" in paragraph numbered 7 of this Unanimous Partial Stipulation and Agreement. Laclede indicates that it has already implemented some of the provisions of the Standards of Conduct set forth in Appendix 2, and Laclede hereby agrees that it shall implement all provisions of the Standards of Conduct contained in Appendix 2 to this Unanimous Partial Stipulation and Agreement within no later than 10 days after the effective date of the Commission's Order approving this Unanimous Partial Stipulation and Agreement, and Laclede requests that the Commission approve this Unanimous Partial Stipulation and Agreement no later than September 20, 2013 so that the specimen tariff sheet set forth in Appendix 3 may become

[2]See footnote 1 above.

effective for service rendered on and after October 1, 2013. Among other things, these recommended Standards of Conduct:

(a) Require that all multi-month (longer than one-month) purchases of gas by Laclede from any supplier, including an affiliate, be done only through a competitive bid and award process;

(b) Require that all short-term (one-month or less) purchases of gas by Laclede from any supplier, including an affiliate, be done through a competitive bid and award process, except for emergency short-term purchases;

(c) Detail the bidding practices, supplier diversity, credit, reliability considerations and other information that must be contemporaneously documented, maintained and provided by Laclede to make such a determination for multi-month or short-term gas purchases;

(d) Detail the contemporaneous documentation requirements and information exchange process for sales of gas supply;

(e) Detail how Laclede releases and purchases of transportation and storage capacity are to be conducted;

(f) Detail how purchases of unsolicited gas supply are to be considered and documented.

4. Regarding affiliate transactions between Laclede and LER that occurred in Case Nos. GR-2005-0203, GR-2006-0288, GR-2008-0140, GR-2008-0387, GR-2010-0138,GR-2011-0055, and GR-2012-0133, the Parties agree that such issues shall be considered resolved in each of these cases with no adjustment to Laclede's ACA balances, provided that:

(a) Laclede shall file the tariff modification set forth in Appendix 3 under which the percentage of Off-System Sales/Capacity Release net margins retained by Laclede during its next three fiscal years beginning October 1, 2013 shall be reduced from 15% to 0% for the first two million dollars in such net margins. Laclede shall not seek to change its percentage retention for the first two million dollars in net margin achieved under its Off-System Sales/Capacity Release tariff during its next three fiscal years beginning October 1, 2013. During such period, changes that would increase Laclede's percentage retention for the net margins achieved in other tiers of the Off-System Sales/Capacity Release shall also not be made unless the Parties agree, and the Commission determines, that such changes are likely to produce net benefits for customers receiving regulated service. This provision does not preclude OPC or the Staff from proposing additional reductions to the net margin percentages retained by Laclede for Off-System Sales/Capacity Release, except that OPC and Staff shall not seek such reductions to address any purchased gas disallowance for the ACA cases being resolved by this Unanimous Partial Stipulation and Agreement; and

(b) Laclede shall comply with the Commission's Rules and with the terms of the CAM set forth in Appendix 1 and the Gas Supply and Transportation Standards of Conduct set forth in Appendix 2 to this Unanimous Partial Stipulation and Agreement for all future transactions with LER and its other affiliates. Such commitment is being made by Laclede solely for purposes of resolving the Laclede affiliate issues in these proceedings and should not be construed as any kind of modification of Laclede's position that the pricing provisions of its prior CAMs satisfied all applicable legal requirements.

5. As a result of the stipulations and agreements contained in this Unanimous Partial Stipulation and Agreement, if approved by the Commission, the Complaint Case shall be dismissed with prejudice. The Parties recommend that other than the issues associated with the Laclede pursuit of overcharges from MoGas and Laclede's treatment of estimates of Lange underground storage non-recoverable gas[3] in Case Nos. GR-2005-0203, GR-2006-0288, GR-2008-0140, GR-2008-0387, GR-2010-0138, GR-2011-0055, and/or GR-2012-0133, this Unanimous Partial Stipulation and Agreement shall resolve all financial issues in these cases[4]. If the Commission approves this Unanimous Partial Stipulation and Agreement, and the Stipulation and Agreement and the Amendment to Stipulation and Agreement filed in Case No. GR-2013-0171, other than issues associated with Laclede's pursuit of overcharges from MoGas there are no other issues in Case Nos. GR-2005-0203, GR-2006-0288, GR-2008-0140, GR-2008-0387, GR-2010-0138, GR-2011-0055, and GR-2012-0133that require either a procedural schedule or resolution by the Commission.

6. As part of this Unanimous Partial Stipulation and Agreement, Laclede agrees that it shall conduct and submit to Staff and OPC no later than November 1, 2013, a current multi-year study (to include a minimum of 3-years of data) showing whether demand charges for swing gas and the pricing option of Lower of FOM Index or Daily Index have resulted in a gain or loss to customers, as previously recommended by Staff in

---

[3]The issue of Laclede's treatment of Lange underground storage non-recoverable gas has been separately addressed by the Stipulation and Agreement in Case No. GR-2013-0171.

[4]It is expressly understood that the resolution of the financial issues in these cases is not intended to affect in any way the Commission's ability to seek whatever statutory remedies are available to the Commission in the currently pending Cole County Circuit Court action Case No. 11AC-CC00320 or Laclede's right to take whatever position it believes is appropriate in that matter.

Case No. GR-2012-0133[5].Laclede also agrees that it will supplement this study with two additional years of recent data and provide such supplement to Staff and OPC by February 1, 2014.Also, as a result of the stipulations and agreements contained in this Unanimous Partial Stipulation and Agreement, if approved by the Commission, Laclede shall withdraw with prejudice its counterclaim in the Complaint Case.

7. Gas Costs

(a) For costs and revenues generally subject to PGA/ACA recovery, except for Asset Management Arrangements/Agreements (AMAs), the Parties believe that Laclede's compliance with the practices, processes and procedures set forth in the Gas Supply and Transportation Standards of Conduct contained in Appendix 2 should result in prices that are consistent with the Affiliate Transaction Rules that state: the regulated gas corporation shall conduct its business in such a way as not to provide any preferential service, information or treatment to an affiliated entity over another party at any time. The Parties expressly reserve the right, however, to: (i) propose further prospective changes to the Standards of Conduct, CAM, or the requested waivers in the event there is a Commission or judicial determination that interprets the Affiliate Transactions Rules in a different manner; (ii) propose at any time prospective changes to the Standards of Conduct, CAM, or the requested waivers to reflect changing market conditions, the potential implementation of new regulatory or operational models for managing gas supply assets, or other developments that cannot be fully anticipated at this time; and (iii) challenge whether application of the Standards of Conduct, CAM, or the requested waivers under a particular set of circumstances produces results consistent with the

[5]See Section II.B.6. of Staff's Recommendation and numbered paragraph 3 of Staff's Reply to Laclede Response filed in Case No. GR-2012-0133; Staff's Reply recommended a minimum of 5-years of data.

requirements of the Affiliate Transactions Rules. Subject to the foregoing, Laclede requests Commission approval for a variance and/or waiver from the Affiliate Transaction Rule documentation and demonstration requirements pertaining to "fully distributed cost" in: 4 CSR 240-40.015 (3)(B), (3)(C)1., (3)(C)2., and (3)(C)3. and 4 CSR 240-40.016 (4)(B), (4)(C)1., (4)(C)2., and (4)(C)3.which state as follows:

> 4 CSR 240-40.015
>
> (3) Evidentiary Standards for Affiliated Transactions.
> (B) In transactions that involve either the purchase or receipt of information, assets, goods or services by a regulated gas corporation from an affiliated entity, the regulated gas corporation shall document both the fair market price of such information, assets, goods and services and the fully distributed cost to the regulated gas corporation to produce the information, assets, goods or services for itself.
> (C) In transactions that involve the provision of information, assets, goods or services to affiliated entities, the regulated gas corporation must demonstrate that it—
> 1. Considered all costs incurred to complete the transaction;
> 2. Calculated the costs at times relevant to the transaction;
> 3. Allocated all joint and common costs appropriately; * * * *
>
> 4 CSR 240-40.016
>
> (4) Evidentiary Standards for Affiliate Transactions.
> (B)In transactions that involve either the purchase or receipt of information, assets, goods or services by a regulated gas corporation from anaffiliatedentity,theregulatedgascorporationshal ldocumentboththefairmarket price of such information, assets, goods and services and the

fully distributed cost to the regulated gas
corporation to produce the information, assets,
goods or services for itself.

(C) In transactions that involve the provision
of information, assets, goods or services
to affiliated entities, the regulated gas
corporation must demonstrate that it—

1. Considered all costs incurred to complete
the transaction;

2. Calculated the costs at times relevant
to the transaction;

3. Allocated all joint and common costs
appropriately; * * * *

The Parties believe that waiving these rules for the limited purpose identified above is reasonable because the information, prices, processes and supporting documentation resulting from compliance with the CAM and Standards of Conduct should ensure that the transaction is priced consistently with the pricing standard of the rules. Laclede does not seek to waive any portions of the rules identified above that pertain to the fair market price documentation and demonstration requirements of the rules.

(b) The CAM, Standards of Conduct, and waivers do not pertain to AMAs.[6] Accordingly, if Laclede Gas chooses to use one or more AMAs for its Laclede or MGE Divisions[7], Laclede Gas shall document fair market price and fully distributed cost as set forth in 4 CSR 240-40.015 and 40.016, unless and until changes to the CAM

[6] "Asset Management Arrangement/Agreement (AMA)" for gas supply and delivery arrangements means an agreement whereby one party, the LDC in this case, contracts with an Asset Manager to manage gas supply and delivery arrangements utilizing all or a portion of one or more of the LDC commodity, transportation and/or storage capacity contracts.

[7] Upon the closing of the transaction currently being addressed in Case No. GM-2013-0254 and Commission approval of this Unanimous Partial Stipulation and Agreement, the CAM contained in Appendix 1 and the Gas Supply and Transportation Standards of Conduct set forth in Appendix 2 to this Unanimous Partial Stipulation and Agreement shall apply to both the Laclede and MGE Divisions of Laclede Gas Company.

and referenced Standards of Conduct addressing AMAs are approved by the Commission.

(c) Laclede requests, for costs and revenues generally subject to PGA/ACA recovery except AMAs, to establish a fair market price by following the provisions in the Standards of Conduct, attached as Appendix 2. Laclede believes there is good cause for granting this variance and/or waiver because the Standards of Conduct are designed in a manner that should establish prices for such transactions that are consistent with the Affiliate Transactions Rules. This variance and/or waiver shall only apply to those portions of the Affiliate Transactions Rules requirements set forth in 7(a)above and only as they pertain to "fully distributed cost" for costs and revenue generally subject to PGA/ACA recovery by Laclede. Subject to the reservation of rights set forth above, no Party objects to the Commission granting such relief.

8. Except as otherwise explicitly provided herein, none of the signatories to this Unanimous Partial Stipulation and Agreement shall be deemed to have approved or acquiesced in any ratemaking or procedural principle, including, without limitation, any method of cost determination or cost allocation, depreciation or revenue related method or any service or payment standard. Except as otherwise explicitly provided herein, none of the signatories to this Unanimous Partial Stipulation and Agreement shall be prejudiced or bound in any manner by the terms of this Unanimous Partial Stipulation and Agreement in this or any other Commission proceeding. Nothing in this Unanimous Partial Stipulation and Agreement shall preclude the Staff in future proceedings from providing recommendations as requested by the Commission or limit Staff's or OPC's access to any information whatsoever in any other proceedings. Nothing in this

Unanimous Partial Stipulation and Agreement shall preclude the Staff or OPC from seeking additional information from Laclede and its affiliates regarding any aspect of its compliance with the rules and the CAM at any time or preclude Laclede or its affiliates from objecting to the provision of such additional information, consistent with the Stipulation and Agreement in GM-2001-342.

9. This Unanimous Partial Stipulation and Agreement has resulted from extensive negotiations among the signatories and the terms hereof are interdependent. In the event the Commission approves this Unanimous Partial Stipulation and Agreement with modifications or conditions that a Party to this proceeding objects to, then this Unanimous Partial Stipulation and Agreement shall be void and no signatory shall be bound by any of the agreements or provisions hereof.

10. In the event the Commission accepts the specific terms of this Unanimous Partial Stipulation and Agreement, the Parties waive, with respect to the issues resolved herein: their respective rights pursuant to Section 536.080.1 (RSMo. 2000) to present testimony, to cross-examine witnesses, and to present oral argument and written briefs; their respective rights to the reading of the transcript by the Commission pursuant to Section 536.080.2 (RSMo. 2000); and their respective rights to judicial review of the Commission's Report and Order in these cases pursuant to Section 386.510 (RSMo. 2000).

11. The Parties agree that all of the prefiled testimony and Staff Recommendations submitted in the cases, as well as affidavits prepared and filed by any of the Parties in lieu of Memoranda in Support, that relates to any issue resolved by this

Unanimous Partial Stipulation and Agreement shall be received into evidence without the necessity of the respective witnesses taking the stand.

12. The Staff shall also have the right to provide, at any agenda meeting at which this Unanimous Partial Stipulation and Agreement is noticed to be considered by the Commission, whatever oral explanation the Commission requests, provided that Staff shall, to the extent reasonably practicable, provide the other Parties with advance notice of when the Staff shall respond to the Commission's request for such explanation once such explanation is requested from Staff. Staff's oral explanation shall be subject to public disclosure, except to the extent it refers to matters that are privileged or protected from disclosure pursuant to the Commission's rules on confidential information.

WHEREFORE, for the foregoing reasons, the undersigned Parties respectfully request that the Commission issue its Order: granting Laclede's request for a variance and/or waiver as set forth in paragraph number 7 above; approving all of the specific terms and conditions of this Unanimous Partial Stipulation and Agreement and Appendices 1 and 2 attached hereto; requiring Laclede to file the tariff modification set forth in Appendix 3 attached hereto; requiring Laclede to conduct and submit to Staff and OPC the study and supplement described in paragraph 6 above; requiring Laclede to make any other filings set forth herein or in the attached Appendices; and dismissing the Complaint Case and Laclede's counterclaim in the Complaint Case with prejudice.

Respectfully submitted,

/s/ Jeffrey A. Keevil
Jeffrey A. Keevil
Senior Counsel
Missouri Bar No. 33825
Missouri Public Service
Commission Staff
P.O. Box 360
Jefferson City, MO 65102
(573) 526-4887
(573) 751-9285 (Fax)
jeff.keevil@psc.mo.gov

ATTORNEY FOR THE STAFF
OF THE MISSOURI PUBLIC
SERVICE COMMISSION

/s/ Michael C. Pendergast
Michael C. Pendergast
Vice President and Associate Gen. Counsel
Missouri Bar No. 31763
Rick Zucker
Missouri Bar No. 49211
Assistant General Counsel - Regulatory
Laclede Gas Company
720 Olive Street
Room 1520
St. Louis, MO 63101
(314) 342-0532
(314) 421-1979 (Fax)
mpendergast@lacledegas.com

ATTORNEYS FOR LACLEDE GAS
COMPANY

Marc Poston
Marc Poston
Deputy Public Counsel
Missouri Bar No. 45722
Office of the Public Counsel
200 Madison Street, Suite 650
P.O. Box 2230
Jefferson City, MO 65102
(573) 751-5558
(573) 751-5562 (Fax)
marc.poston@ded.mo.gov

ATTORNEY FOR THE MISSOURI
OFFICE OF THE PUBLIC COUNSEL

Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronic mailed to all counsel of record this 16th day of July, 2013.

/s/ **Marcia Spangler**

I. INTRODUCTION

The Missouri Public Service Commission ("Commission") enacted the Affiliate Transactions Rules found at 4 CSR 240-40.015 and 40.016 (the "Rules"). The Rules describe a cost allocation manual ("CAM") as including the criteria, guidelines and procedures the utility will follow to be in compliance with the Rules. The Rules also state that the CAM should set forth cost allocation, market valuation and internal cost methods related to transactions with affiliates.

The purpose of this CAM is to aid Laclede Gas Company ("Laclede") in complying with the requirements of the Rules and in doing so, to provide the Commission with transparency into processes and procedures that govern how costs are determined, allocated and assigned between Laclede and its affiliates, and define how fair market price (FMP) and fully distributed cost (FDC) are to be calculated. This CAM only addresses a portion of the requirements of the Rules and in Laclede's opinion compliance with this CAM constitutes evidence of compliance with those portions of the Rules.

Laclede will seek, through a waiver request, specific Commission approval of any provision of this CAM that varies from the specific requirements of any Commission rules or Commission approved Stipulation and Agreement, including those reached in Case Nos. GM-2001-342 and GR-2010-0171.

The CAM, including all Appendices, and associated CAM Reports will be submitted to the Commission's EFIS filing system in accordance with the timelines outlined in the Rules and any waivers or variances to the Rules approved for Laclede by

the Commission. Once the CAM is officially approved by the Commission, any changes to the CAM will be submitted to Staff and OPC. Any changes to the Commission-approved CAM or the Services and Facilities Agreementwill be filed with the Commission for approval. All contracts and agreements between Laclede and one or more of its affiliates (including Laclede Group, Inc.) will be maintained and made available to Staff and OPC during their effectiveness and for at least six years afterwards, on mutually agreeable terms.

II. ANNUAL REPORTING REQUIREMENTS, RECORD RETENTION AND ACCESS TO RECORDS

Laclede and its affiliates shall adhere to reporting requirements of the Rules and maintain records of all procedures, allocation methods, and transactional data relating to sales and purchases of goods and services between Laclede and its affiliates.

Laclede Gas Company shall maintain the following information in a mutually agreed-to electronic format regarding affiliate transactions on a fiscal year basis and consistent with the waiver approved in Case No. GE-2011-0171, shall provide such information, in addition to the information required by 4 CSR 240-40.015 Section 4 to the Chief Staff Counsel, Manager of the Auditing Department and the OPC on or before December 15th of each year by submitting an annual report to the non-case related portion of EFIS devoted to affiliate transaction submissions. Specifically, Laclede shall submit:

1. A full and complete list of allaffiliated entitiesas defined by the Commission's Affiliate Transactions Rules including the following:

- An organization chart depicting the total family of companies within the Laclede Group, Inc. structure.

- An organizational chart for Laclede Gas Company and any affiliate doing business with Laclede Gas.
- A listing and comprehensive and detailed description of each non-regulated activityengaged in by Laclede Gas andits affiliates.
- The total dollar amount of revenues and expenses for each non-regulated activity for the last fiscal year.
- A listing of all Laclede Gas Company cost centers and functions that directly or indirectly assign or allocate cost to any non-regulated activity engaged in by Laclede Gas Company or any affiliated entity.

2. For each good and service provided to Laclede Gas Company by affiliated entities or provided to affiliated entities by Laclede Gas Company, Laclede shall provide on a fiscal year basis:

- A description of all Laclede Gas Company functions that provide support to non-regulated affiliated business units, including Laclede Group, Inc. and the positions and number of employees providing each function; a requirement that may be satisfied by submission of the employee affiliate time allocation data base that Laclede currently provides to Staff;
- A list and description of each good and service;
- The dollar amount of each transaction involving such goods and services, including the FERC USoA account charged;
- A full and complete list of each contract entered into by Laclede Gas Company with affiliated entities;
- A full and complete list of each affiliate transaction undertaken by Laclede Gas Company with affiliated entities without a written contract together with a brief explanation of why there was no contract;and,
- The procedures to be used to measure and assign costs to non-regulated units for each function provided by Laclede Gas Company.

3. The annual dollar amount of each service and good charged to each affiliate by Laclede Gas Company and the annual dollar amount of each service and good purchased from each affiliate;

4. The basis used (e.g., fair market price, FDC, etc.) to record each affiliate transaction and, unless otherwise addressed herein, a detailed discussion of the basis for determining

the charges from Laclede Gas Company to affiliated companies, and charges to Laclede Gas Company from affiliated companies, including:

- For all FDC calculations, a description of the cost allocation process employed for each service and good and justification for the allocation method used unless otherwise addressed in this CAM.
- For all FDC calculations, how direct, indirect and common activities are assigned for each service and good unless otherwise addressed in this CAM.
- How the fair market price or value for each service and good is determined unless otherwise addressed in this CAM.
- A description of the criteria employed to determine whether volume discounts or other pricing considerations were provided by Laclede Gas Company to affiliates.

5. In addition, Laclede Gas Company shall maintain on a fiscal year basisbooks of accounts and supporting records in sufficient detail to permit verification of compliance with the Commission's Affiliate Transactions Rules and shall provide access to all information and personnel necessary to audit individual transactions between it and its affiliates to ensure it complies with the pricing and costing standards set forth in this CAM.

6. Laclede's gas marketing affiliate(s) shall provide an annual presentation to Staff and OPC to discuss future business plans and strategies.

7. Recitation of the annual reporting requirements listed above is not intended to preclude the Staff or OPC from seeking additional information from Laclede Gas Company and its affiliates regarding any aspect of its compliance with the rules and the CAM at anytime or to preclude Laclede or its affiliates from objecting to the provision of such additional information, consistent with the Stipulation and Agreement in GM-2001-342.

III. SERVICES AND FACILITIES AGREEMENT

The Laclede Group and each affiliate taking or receiving services, sharing facilities or having other affiliate transactions with Laclede Gas will sign and become a party to a Services and Facilities Agreement ("SFA"). The SFA establishes procedures, terms and conditions for providing shared services and facilities and other activities. To the extent that the SFA specifies terms and conditions for providing shared services and facilities and other activities relating to Laclede Gas Company's regulated services, the SFA shall comply with the Commission's Affiliate Transactions Rules and applicable Commission orders. A copy of the SFA is attached hereto as Attachment1.

IV. ACCOUNTING PROCEDURES

Laclede Gas Company and its affiliates shall maintain adequate books and records with respect to the transactions described in this CAM and in the SFA in order to record the costs, payments and receipts to be assigned to Laclede Gas Company and affiliates. Laclede Gas Company shall be responsible for ensuring that all costs, payments and receipts associated with transactions covered by this CAM are properly and consistently assigned in accordance with the terms and provisions of the CAM and SFA.

Laclede Gas Company, each affiliate and The Laclede Group, Inc. will maintain records supporting its affiliated transactions for at least six years or as required by other Commission rules or law, whichever is greater.

Laclede Gas Company shall conduct audits concerning its compliance withany rules, Commission Orders, Commission-approved Stipulations and Agreements, Laclede's CAM and its SFA relating toLaclede affiliated transactionsno less often than

every three calendar years and shall file with its annual CAM submission its internal audit plan for affiliate transactions.

V. EVIDENTARY STANDARDS FOR AFFILIATED TRANSACTIONS

In each and every transaction that involves either the purchase or receipt of information, assets, goods or services by Laclede Gas Company from an affiliated entity, Laclede shall create written documentation that supports both the fair market price of such information, assets, goods and services and the fully distributed cost toproduce or acquire the information, assets, goods or services for itself.

A. In all transactions, unless a Commission approved waiver applies, that involve the provision of information, assets, goods or services to affiliated entities, Laclede Gas Company must demonstrate that:

- It considered and included all operating, capital and other costs incurred to complete the transaction in its FDC analysis;
- It calculated the costs at times relevant to the transaction in its FDC analysis;
- It allocated all joint and common costs (including Laclede's cost of capital) appropriately in its FDC analysis;
- It adequately determined, documented, calculated and explained the fair market price of the information, assets, goods or services, including a description of the methods and procedures used to determine the current prices of these or related services in the competitive market; and,
- The dollar amount of the FMP and FDC will be readily discernible upon a review or audit of the transaction.

B. *Gas Supply and Transportation Standards of Conduct.*Consistent with the Unanimous Partial Stipulation and Agreement filed on July 16, 2013, in Case No. GC-2011-0098, Laclede shall rely on itsGas Supply and Transportation Standards of Conduct as set forth in Appendix 2 for its gas supply and transportation procurement and sales

transactions processes (Gas Transactions), including off-system sales and capacity release.

C. *Gas Supply and Transportation Standards of Conduct Documentation*

Laclede shall include its Gas Supply and Transportation Standards of Conduct as part of its CAM. For any updatesto the Gas Supply and Transportation Standards of Conduct Laclede shall request Commission approval and copies of any change shall be provided to Staff and OPC by submitting both a copy of the modified version, with changes accepted, and a draft version that shows the additions and deletions (track-changes).

VI. SERVICES, FACILITIES AND ACTIVITIES

The SFA will be reviewed by Laclede Gas Company on an annual basis to ensure that the policies and procedures in the SFA are designed and administered in a manner that, except as necessary or needed to provide corporate support services as described below, ensures that no preferential service (as defined by 4 CSR 240-40.015(1)(H)) is provided to any affiliate of Laclede Gas Company through its transactions under the SFA. Each affiliated party to the SFA will determine the appropriate level of services, facilities or other activities it requires and will make such requests as it deems appropriate.

A. Corporate Support Facilities. Upon the terms and subject to the conditions of the CAM and SFA, a Party may request the use of:

(a) facilities, including office space, warehouse and storage space, fixtures and office furniture and equipment;

(b) computer equipment (both stand-alone and mainframe) and networks, peripheral devices, storage media, and software;

(c) communications equipment, including audio and video equipment, radio equipment, telecommunications equipment and networks; and,

(d) vehicles, including automobiles, trucks, andvans

No Party, including Laclede Gas Company,shall have anobligation to provide any of the foregoing to the extent that such item or items are not available (either because such Party does not possess the item or the item is otherwise being used). A Party has sole discretion in scheduling the use of facilities, equipment or capabilities so as to avoid interference with that Party's operations. Laclede Gas Company shall not schedule the use of facilities, equipment or capabilities if it interferes with Laclede Gas Company's operations.

B.*Corporate Support Services.* The Parties may enter into agreements for services upon the terms and subject to the conditions of the CAM and the SFA. No Party, including Laclede, shall be obligated to offer any of the following corporate support services to any affiliated or unaffiliated party:

(a) Joint corporate oversight and governance, administrative and management services, including accounting (i.e., bookkeeping, billing, accounts receivable administration and accounts payable administration, and financial reporting); audit; executive; finance; insurance; information systems services; investment advisory services; legal; library; record keeping; secretarial and other general office support; real estate management; security holder services; tax; treasury; and other administrative and management services;

(b) Personnel services, including recruiting; training and evaluation services; payroll processing; employee benefits administration and processing; labor negotiations and management; and related services;

(c) Research and development, including drafting and technical specification development and evaluation; engineering; environmental; research; testing; and training.

No Party, including Laclede Gas Company, shall have anobligation to provide any of the foregoing to the extent that it is not capable of providing such service (either

because such Party does not have personnel capable of providing the requested service or the service is otherwise being used). A Party has sole discretion in scheduling of services so as to avoid interference with the Party's operations. Laclede Gas Company shall schedule the provision of any services so as to avoid interference with regulated operations.

C. Cash Management. The Parties may enter into one or more arrangements providing for the central collection, management, investment and disbursement of cash by a Party. Any such cash management arrangement shall be fully consistent with the pricing standards of the Rules and shall not provide a preferential service (information,treatment or actions by the regulated gascorporation which places the affiliated entityat an unfair advantage over its competitors).If suchcash managementarrangement is established, then pursuant to the SFA:

> (a) the Parties participating in such arrangement shall establish appropriate inter-company accounts to track the amount of cash transferred and/or received by each Party to such arrangement and the pro rata portion of the earnings received or interest paid by each such party from the investment or borrowing of cash; and
>
> (b) the Party responsible under the arrangement for the management and investment of such cash shall establish a separate account or accounts for such purpose, which account(s) and the records associated therewith shall clearly indicate that other Parties have an interest in said account(s) and the proceeds thereof and shall not be subject to set-off by the bank or other institution holding the same except to the limited extent of expenses arising from the management, handling and investment of the account(s).

D.Agreements, Etc. A Party may evidence their agreement with respect to the availability, provision or use of the facilities, services and activities described in this CAM by entering into an agreement, lease, license or other written memorandum or evidence consistent with the terms of the SFA.

VII. ASSET TRANSFERS

Laclede Gas Company shall not sell, lease, assign or transfer to any affiliate or third party any of its utility assets that are used and useful in the performance of Laclede's public utility obligations without obtaining priorCommission approval.

VIII. CHARGES; PAYMENT

A. Charges. Charges for the use of facilities, equipment, capabilities or services shall be determined in accordance with the section below regarding cost principles. By requesting the use of facilities, equipment, capabilities and/or services, a Party shall be deemed to have agreed to pay, and shall pay, to the Provider or Providers the charge determined therefor in accordance with Commission rules, the CAM and the SFA.

B. Payment. Payment for the facilities, services and other activities shall be accounted for on a monthly basis and shall accrue interest if not made by the last day of the month following the month in which the service was rendered. Late payments shall bear interest at a simple rate per annum equal to the prime bank lending rate as published in The Wall Street Journal (on the first day of the month) minus one percentage point. Such interest shall be based on the period of time that the payment is late.

IX. TRANSFER PRICING/COSTING METHODOLOGY

A. Use of Facilities or Goods or Services -- General. (i) Facilities, goods or servicesprovided to Laclede Gas Company by an affiliated provider shall be charged to Laclede Gas Company at the lesser of the FMP for such facilities, goods or services orthe FDC to Laclede Gas Company to provide the facilities, goods or services to itself, subject to all applicable Commission approved waivers.

(ii) Facilities, goods or services, including shared services provided by Laclede Gas Company to an affiliate, shall be charged by Laclede Gas Company at the greater of the fair market price of such facility, good or service or at the fully distributed cost incurred by Laclede Gas Company in providing such facility, good or service to itself.

B. Fair Market Price. The fair market price of an asset or service as used in subsection A (i) and (ii), means:

1. The price of an arms-length exchange for the same good or service for cash in the marketplace at or near to the date of the transaction. If there is evidence that the marketplace transaction was not conducted at arms-length (the amount at which assets, goods or services would change hands between an unaffiliated willing buyer and seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts) or if there is evidence that the market price has changed materially between the date of the marketplace exchange and the date of the affiliate transaction, then the marketplace transaction cannot be used as the basis of determining the fair market price in a transaction with an affiliate, unless appropriate adjustments are made to reflect such market changes.

2. In the absence of a cash transaction on which to base fair market price, or in situations where the cash transaction cannot be used as described in number one above, Laclede will determine and document the fair market price established by the transactions of other unaffiliated entities that have bought or sold the same or similar items in recent cash transactions under comparable terms and conditions.

a. Laclede's Human Resources Department or Procurement personnel will make reasonable efforts through market surveys to ensure that the fully distributed cost

allocated to affiliates for services provided by Laclede falls within the range of prices charged for such services by outside companies or firms that engage in similar work. If the results of such surveys demonstrate that the costs charged by Laclede for such services consistently fall below such range, then an adjustment shall be made at the time of Laclede's annual CAM filing to bring the amount allocated within the range. The results of the market surveys will be made available to the Staff and OPC as requested. The market survey performed by Laclede will be updated in each rate case, but not less than every 18 months.

3. In the absence of cash transactions made by Laclede in the marketplace (number one above) and a lack of data about transactions by other entities (number two above), Laclede can use benchmarking practices (4 CSR 240-40.015 (3)(D) and 4 CSR 240-40.016 (4)(D)), if approved by the Commission in a later filing.

4. For costs and revenues generally subject to PGA/ACA recovery, refer to the requirements in Appendix 2, Gas Supply and Transportation Standards of Conduct.

C. *Fully Distributed Costs.* The fully distributed cost of an asset or service as used in subsections A (i) and A (ii), means: (1) Laclede Gas Company's cost of labor(including all labor overheads such as pensions and OPEBs), the rent or capital costs associated with the facilities used by such employees, the depreciation expense on equipment used by such employees, and debt and equity costs associated with any utility investments consumed in the process of providing the asset or service that would be directly attributed and charged to the asset or service; and (2) a reasonable allocated share of Laclede Gas Company's indirect joint and common labor and administrative and general costs. The actual application of fully distributed cost allocations occurs through

what is commonly called the "three-step" allocation method. This method begins with the premise that to the maximum extent practical, all costs which can be specifically attributed to a business segment are directly charged to that business segment. Secondly, indirect costs which cannot be directly charged are allocated to business segments on the basis of a causal relationship. In the third step, any remaining costs which cannot be reasonably associated with a specific, identifiable, causal relationship shall be allocated using a general allocator as described below.

(i) Direct Costs. Costs incurred for materials or services that are specifically attributable to goods or services provided to an affiliate shall be charged directly to the books and records of the affiliate, using standard voucher account distribution procedures. Such charges will be visible in the accounting records through cash vouchers, invoices, or other source documents.

(ii) Direct Labor Costs. Amounts for direct labor (and direct labor overheads) used in providing a service to an affiliate shall be charged to the accounts of affiliates based on direct labor and overhead rates as applied to time-keeping records. For most employees, direct labor shall be charged under a positive time reporting methodology under which an employee shall report each pay period the amount of time incurred in performing the service. Based on the time reported each pay period, the regular, predetermined account distribution for the employee shall be adjusted to reflect the distribution of direct labor charges to the service.

Some departments or organizations are expected to provide a recurring, predictable level of services to a Party or Parties. For these departments or organizations, annual reviews shall be performed and documented to determine a normal distribution of

time to such services. The distribution percentages derived from such reviews shall then be used to allocate time with respect to each pay period. For these departments or organizations, direct labor shall be charged to the service under an exception time reporting methodology. That is, significant deviations of actual activity from these predetermined percentages shall be reported and shall result in adjustments to the predetermined distribution of direct labor charges to the affiliate functions. Officers of Laclede Gas Company shall also utilize either a positive time or an exception time reporting methodology.

Overtime costs shall be reflected in the direct labor rates charged to a service. Direct labor shall be charged based either on the base and overtime pay amounts actually incurred by Laclede Gas Company or, as adjusted on a departmental or organizational basis, to reflect estimated overtime incurred based on an overtime review performed periodically.

All charges for direct labor charges shall reflect a cost for nonproductive time. The cost for nonproductive time shall be based either on actual nonproductive time incurred by Laclede Gas Company, or as adjusted on a departmental or organizational basis, to reflect estimated nonproductive time derived from a periodic review. The cost for nonproductive time reflects time incurred for vacations, holidays, and other paid absences.

Many payroll-related costs are charged through separate journal entries via clearing account distributions that directly follow the payroll charged to the accounts of the affiliate and as described below.

(iii) Indirect and Allocated Costs. When costs benefit more than one entity or when costs cannot be specifically associated with a particular activity, the fully distributed cost of each expense item (including administrative and general costs, and the cost of facilities, equipment, machinery, furniture and fixtures used to provide the service) shall be allocated as set forth below: For some expense items that cannot reasonably be directly assigned and cannot also be reasonably allocated using any cost-causation allocation factor it is common to combine three financial components to determine an allocation factor referred to as a general allocator (also known as a Massachusetts Formula or Three-Factor Formula). This three-component allocation factor is derived by calculating the percent of each affiliate's share of the total of each financial component. The three components which are included in the allocation factor are to be selected as the most reasonable factors on which the specific costs should be allocated.

Laclede currently uses a general allocator based on1) fixed assets and investments, 2) revenues, and 3) direct payroll. These factors should be continuously monitored for fairness, relevance, reasonableness and appropriateness and, if the business or operational considerations supporting the propriety of the general allocator computation change materially, and continued use of the allocation method results in an inequitable allocation of costs, Laclede shall immediately change one or more of the component factors to ensure that the costs are being allocated on the most equitable and appropriate basis. Laclede shall document the reason for the change and the reasons for the selection of new factors.

In addition, each party shall be free in a subsequent rate case to propose changes to the calculation of the components used in Laclede's fully distributed cost determination, the financial metrics to be included in the general allocator and in the allocation factors described below.

The following expense items are allocated as indicated below:

Administrative & General Expenses – Total miscellaneous administrative and general expenses charged to the utility that cannot reasonably be directly assigned shall be allocated to affiliated entities based on the percentage of each affiliates' direct payroll charges as compared with total payroll charges. These expenses include phone charges, office and computer supplies, printing, subscriptions, travel, and other general expense items. Administrative and general expenses identifiable and specific to a particular affiliate will be charged directly to that affiliate.

Annual Report & SEC Reporting Costs – These costs shall be allocated to each affiliated entity based on the three-component allocation method as applied to the previous fiscal year unless a review of the SEC Reports and Annual Report indicate that the three-factor formula does not result in a reasonable allocation of these costs.

Board of Director Fees – Unless a review of the Board of Director minutes indicate that the three-factor formula does not result in a reasonable allocation of these costs, these costs shall be allocated to each affiliate based on the three component allocator.

Depreciation – An allocation of depreciation expense related to the cost of utility-owned facilities, equipment, machinery, furniture or fixtures utilized by an affiliate or in providing a service to an affiliate shall be charged to each affiliate based on the portion of

time each asset or class of asset is dedicated to non-utility work. Furniture and fixtures will be allocated on a cost per employee basis as applied to direct man-hours reported for each affiliate.

Employee-Related Costs – Expenses related to payroll taxes, medical, dental, and vision insurance costs, pension and other post-retirement benefit costs, incentive compensation plan costs, and employee savings plan costs will be allocated based on direct payroll hours charged to each affiliate.

Information Systems – The costs of projects dedicated to affiliates will be charged directly to each affiliate. All costs, including capital costs related to the operation of mainframe systemswill be allocated based on a percentage of operating and production time dedicated to routine affiliate activities as compared to the total for each system. Such allocations shall be based on a study performed annually. Costs related to network applications, including capital costs,will be allocated based on the number of personal computers assigned on a departmental basis. The departmental allocation of costs will be appropriately allocated to affiliates based on the proportion of direct labor reported by each department for an affiliate.

Insurance – The cost of insurance directly related to the property or activities of any affiliate will be charged directly to each affiliate. The cost of insurance policies(including capital costs on the prepaid insurance costs included in the regulated rate base) applicable to more than one entity will be allocated based on the proportion of each affiliate's share as compared with the total company as follows:

Property Insurance – fixed assets at book value (net plant)

Liability Insurance – actual claims cost

Workmen's Compensation – actual claims cost will be charged directly and the administrative fees will be allocated based on number of employees submitting claims.

Officers & Directors Liability Insurance – three-component allocator as described above

Such allocations shall be based on the above parameters at September 30 of the previous fiscal year.

Outside audit fees – Outside audit fees shall be allocated based on the three factor allocation formula.

Rent – Rent expense for costs associated with operating leases for space dedicated to affiliated operations will be priced on a cost per square foot basis and charged directly to each affiliate. In addition, an allocation of indirect costs for rent will be made based on an annual cost per man-hour of rent expense as applied to direct payroll hours charged to each affiliate. Rent expense related to capital leases will include a capital cost component.

Vehicle costs – The operating and capital costs related to applicable vehicle groups will be allocated based on direct payroll hours charged to each affiliate and/or through the allocation of administrative and general expense described above.

The allocation factors described above are to be used for recordkeeping and financial reporting purposes and do not necessarily represent how such costs will be allocated or assigned for ratemaking purposes in subsequent rate cases.

When it becomes known that one of the above allocation methods no longer appears reasonable or equitable, Laclede will adjust or modify the allocation

methodology to ensure that the costs are allocated on the most reasonable and equitable basis possible and will document the reasons for the changes.

D. Transfer Pricing/Costing Methodology for Energy-Related Goods and Services. Transactions between Laclede Gas and its affiliates for energy-related goods and services will be priced and conductedin accordance with the Gas Supply and Transportation Standards of Conduct, Appendix 2 to the CAM.

X. CUSTOMER REQUESTS ABOUT GOODS AND SERVICES

Where requirements relating to customer requests for information concerning the goods and services provided by an affiliated entity are applicable, Laclede Gas Company will provide customers with an oral or written disclaimer indicating that regulated services are not tied to the use of the affiliated entity and that other service providers may be available.

XI. DISPUTE RESOLUTION

If there is a dispute between Laclede Gas Company and any affiliate regarding a billing, representatives of all involved parties will meet to resolve the issues. Managers and other executives of the affected parties may also be consulted. In the event that a resolution cannot be reached, the issue will be referred to senior management for final resolution. Documentation of disputes and resolutions will be maintained by Laclede Gas Company including recommendations for changes to policies, procedures, and processes to assure adequate protections for Laclede Gas Company on a moving forward basis.

XII. EXCEPTIONS TO APPLICATION OF METHODOLOGIES

Laclede Gas Company may employ a different allocation or pricing methodology than those described herein in the event it determines to its best knowledge and belief that application of the methodologies or costing principles described herein would not be in the best interests of its customers receiving regulated utility service, provided that Laclede Gas Company shall maintain information sufficient to show how costs would have been allocated to such services pursuant to the methodologies set forth in this CAM, and provided further that such alternative methodology will be subject to review and adjustment in any subsequent Commission case proceeding. In the event Laclede Gas Company enters into a non-complying affiliate transaction, it shall document such transaction and file a notice of that transaction to the Commission and Public Counsel within 10 days of doing so as required by 4 CSR 240-40.015 (10)(A)2and 4 CSR 240-40.016 (11)(A)2 for variances from the Affiliate Transaction Rule.

XIII. STAFF AND OFFICE OF THE PUBLIC COUNSEL CHALLENGES

Nothing in Laclede Gas Company's CAM prevents the Staff, OPC or any other party from challenging whether the prices charged for specific transactions are consistent with the pricing methodology set forth in this CAM and in Commission rules, or from suggesting changes in such methodology or in the allocation methodology used to assign costs between Laclede Gas Company and its affiliates during a case before the Commission.

XIV. ACCESS TO UTILITY RECORDS

Laclede Gas Company shall ensure that it prohibits access by affiliates, subsidiaries, and third parties to customer specific information (such as customer lists,

customer usage, etc.) possessed by the utility unless specifically authorized by the customers in writing. Laclede shall maintain all documentation of such authorizations.

Submitted,

The Laclede Group, Inc.
Laclede Gas Company
Laclede Investment LLC
Laclede Development Company
Laclede Pipeline Company
Laclede Energy Resources, Inc.
Laclede Venture Corp.
Laclede Gas Family Services, Inc.

SERVICES AND FACILITIES AGREEMENT

THIS SERVICES AND FACILITIES AGREEMENT (this "Agreement") is made and entered among Laclede Gas Company, The Laclede Group, Inc., Laclede Investment LLC, Laclede Development Company, Laclede Pipeline Company, Laclede Energy Resources, Inc., Laclede Venture Corp., Laclede Gas Family Services, Inc., and each of the entities identified on Exhibit A hereto, as such Exhibit A may be amended from time to time in accordance with the provisions of this Agreement.

WITNESSETH:

WHEREAS, the parties are related by virtue of common ownership, directly or indirectly, of their equity securities by The Laclede Group, Inc.; and

WHEREAS, the parties believe that the central management of certain services and the provisions to each other of certain services and facilities are or may be efficient and cost effective, and the parties desire to make provision for these and other transactions as between Laclede Gas Company and another Laclede Group Entity or Entities;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained herein, the parties hereby agree as follows:

ARTICLE I

Definitions and Interpretation

Section 1.1. *Definitions.* As used in this Agreement, the following terms shall have the respective meanings set forth below unless the context otherwise requires:

"*Commission*" means the Missouri Public Service Commission.

"Cost Allocation Manual" or "CAM" means the then effective version of the Laclede Gas Company Cost Allocation Manual.

"*Laclede Group Entity*" means The Laclede Group, Inc. and any of the entities identified on Exhibit A.

"*Party*" means each, and "*Parties*" means all, of the entities who are from time to time a party to this Agreement.

"*Provider*" means a Party who has been requested to, and who is able and willing to, furnish facilities, provide services or have other transactions with a Requestor under the terms of this Agreement.

"*Requestor*" means a Party who desires to use facilities, receive services or have other transactions with a Party and has requested another Party to furnish such facilities, provide such services or transactions.

Section 1.2. *Purpose and Intent; Interpretation.* (a) The purposes and intent of this Agreement are to set forth procedures and policies to govern (i) transactions between a Laclede Group Entity and Laclede Gas Company, whether such transactions occur directly or indirectly as the end result of a series of related transactions and (ii) the allocation of certain joint service costs. It is not intended to govern transactions between Laclede Group Entities that do not involve Laclede Gas Company, although such entities may elect to apply the provisions of this Agreement to transactions among themselves. This Agreement shall be interpreted in accordance with such purposes and intent.

(b) The headings of Articles and Sections contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

ARTICLE II

Use of Facilities and Services

Section 2.1. *Facilities.* Upon the terms and subject to the conditions of this Agreement, a Requestor may request a Provider or Providers to make available or provide facilities and equipment as described in the CAM. A Provider shall have no obligation to provide any facilities to the extent that such item or items are not available (either because such Provider does not possess the item or the item is otherwise being used); and it is understood that a Provider has sole discretion in scheduling the use by a Requestor of facilities, equipment or capabilities so as to avoid interference with such Provider's operations.

Section 2.2. *Services.* Upon the terms and subject to the conditions of this Agreement, a Requestor may request a Provider or Providers to provide services as described in the CAM. A Provider shall have no obligation to provide any service to the extent that it is not capable of providing such service (either because such Provider does not have personnel capable of providing the requested service or the service is otherwise being used); and it is understood that a Provider has sole discretion in scheduling the use by a Requestor of services so as to avoid interference with such Provider's operations.

Section 2.3. *Joint Purchasing.* A Party may also request that another Party or Parties enter into arrangements to effect the joint purchase of goods or services from third parties. Laclede Gas will only participate in such arrangements if its fully distributed cost for such goods or services is not thereby increased.

Section 2.4. *Cash Management.* The Parties may enter into one or more arrangements providing for the central collection, management, investment and

disbursement of cash by a Party. If such an arrangement is established, then such procedures as are set forth in the CAM will apply.

Section 2.5. *Agreements, Etc.* A Party may evidence their agreement with respect to the availability, provision or use of the facilities, services and activities by entering into an agreement, lease, license or other written memorandum or evidence consistent with the terms of this Agreement.

ARTICLE III

Charges; Payment

Section 3.1. *Charges.* Charges for the use of facilities, equipment, capabilities or services provided to or by Laclede Gas Company shall be determined as set forth in the CAM.

Section 3.2. *Accounting.* Each Party shall maintain adequate books and records with respect to the transactions subject to this Agreement and shall be responsible for maintaining internal controls where applicable to ensure the costs associated with such transactions are properly and consistently determined and billed in accordance with the terms and provisions of this Agreement and the CAM.

Section 3.3. *Payment.* Payment for the facilities, services and other activities shall be on a monthly basis and shall be made in accordance with the procedures set forth in the CAM.

ARTICLE IV

Cost Apportionment Methodology

The cost allocation and pricing principles and methods specified in the then effective CAM shall be used to price and allocate costs relating to services provided to or by Laclede Gas Company under this Agreement.

ARTICLE V

Limitations of Liability

Section 5.1. *No Warranties for Facilities or Services.* Each Party acknowledges and agrees that any facilities, equipment or capabilities made available, and any services provided, by a Provider to a Requestor hereunder, are so made available or provided WITHOUT ANY WARRANTY (WHETHER EXPRESS, IMPLIED OR STATUTORY AND NOTWITHSTANDING ANY ORAL OR WRITTEN STATEMENT BY A PARTY'S EMPLOYEES, REPRESENTATIVES OR AGENTS TO THE CONTRARY) WHATSOEVER. ALL SUCH WARRANTIES (INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND

FITNESS FOR A PARTICULAR PURPOSE) ARE HEREBY DISCLAIMED AND EXCLUDED.

Section 5.2. *No Partnership.* The Parties acknowledge and agree that this Agreement does not create a partnership between, or a joint venture of, a Party and any other Party. Each Party is an independent contractor and nothing contained in this Agreement shall be construed to constitute any Party as the agent of any other Party except as expressly set forth in Sections 2.3 and 2.4.

Section 5.3. *No Third Party Beneficiaries.* This Agreement is intended for the exclusive benefit of the Parties hereto and is not intended, and shall not be deemed or construed, to create any rights in, or responsibilities or obligations to, third parties.

ARTICLE VI

Term

Section 6.1. *Term.* This Agreement will be effective on the date provided herein and shall continue, unless terminated as provided in Section 6.2 or renewed as hereinafter provided, until the tenth anniversary of such date (the "Initial Term"). Unless written notice that this Agreement shall terminate on the last day of the Initial Term or any then current renewal term is provided by a Party at least 30 days prior to the expiration of the Initial Term or such renewal term, this Agreement shall continue for successive renewal terms of five years as to such Party and any other Parties not providing any such termination notice.

Section 6.2. *Termination.* Any Party may terminate this Agreement as to it by providing at least 30 days prior written notice to the other Parties of the effective date of such termination. Any such termination shall not affect the terminating Party's accrued rights and obligations under this Agreement arising prior to the effective date of termination or its obligations under Section 8.4.

ARTICLE VII

Confidential Information

Each Party shall treat in confidence all information, which it shall have obtained regarding the other Parties and their respective businesses during the course of the performance of this Agreement. Such information shall not be communicated to any person other than the Parties to this Agreement, except to the extent disclosure of such information is required by a governmental authority. If a Party is required to disclose confidential information to a governmental authority, such Party shall take reasonable steps to make such disclosure confidential under the rules of such governmental authority. Information provided hereunder shall remain the sole property of the Party providing such information. The obligation of a Party to treat such information in confidence shall not apply to any information which (i) is or becomes available to such

Party from a source other than the Party providing such information, or (ii) is or becomes available to the public other than as a result of disclosure by such Party or its agents.

ARTICLE VIII

Miscellaneous

Section 8.1. *Entire Agreement; Amendments.* Upon its effectiveness as provided in Section 6.1, this Agreement shall constitute the sole and entire agreement among the Parties with respect to the specific subject matter hereof and shall, with respect to such subject matter, supersede all previous agreements, proposals, oral or written, negotiations, representations, commitments and all other communications between some or all of the Parties. Except as provided in Section 8.2 with respect to new Parties and except that Laclede Group may amend Exhibit A to this Agreement to delete any terminated Party, this Agreement shall not be amended, modified or supplemented except by a written instrument signed by an authorized representative of each of the Parties hereto.

Section 8.2. *New Parties.* Any other entity which is or may become an affiliate of The Laclede Group or any of the other Parties to this Agreement may become a party to this Agreement by executing an agreement adopting all of the terms and conditions of this Agreement. Such agreement must be signed by The Laclede Group in order to become effective, but need not be signed by any other Party to this Agreement. Upon such execution by The Laclede Group, such entity shall be deemed to be a Party and shall be included within the definition of "Party" for all purposes hereof, and Exhibit A shall be amended to add such entity.

Section 8.3. *Assignment.* This Agreement may not be assigned by any party without the prior written consent of The Laclede Group.

Section 8.4. *Access to Records.* During the term of this Agreement and for any period thereafter required by law, Laclede Gas Company shall maintain and provide, in accordance with the terms of the Stipulation and Agreement approved in GM-2001-342, reasonable access to any and all books, documents, papers and records of Laclede Gas Company which pertain to services and facilities provided to or received by Laclede Gas Company.

Section 8.5. *Partial Invalidity.* Wherever possible, each provision hereof shall be interpreted in such manner as to be effective and valid under applicable law, but in case any one or more of the provisions contained herein shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such provision shall be ineffective to the extent, but only to the extent, of such invalidity, illegality or unenforceability without invalidating the remainder of such invalid, illegal or unenforceable provision or provisions or any other provisions hereof, unless such a construction would be unreasonable.

Section 8.6. *Waiver.* Failure by any Party to insist upon strict performance of any term or condition herein shall not be deemed a waiver of any rights or remedies that such Party may have against any other Party nor in any way to affect the validity of this Agreement or any part hereof or the right of such Party thereafter to enforce each and every such provision. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other or subsequent breach.

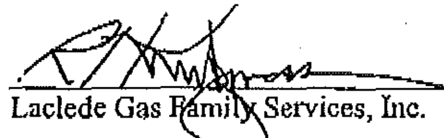
Section 8.7. *Governing Law.* This Agreement shall be governed by, construed and interpreted pursuant to, the laws of the State of Missouri.

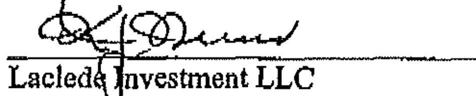
IN WITNESS WHEREOF, the Parties have each caused this Agreement to be executed by a duly authorized representative on August 8, 2003.

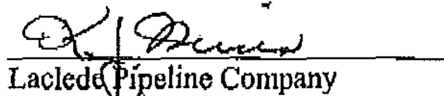
Laclede Gas Company

Laclede Venture Company

The Laclede Group, Inc.


Laclede Gas Family Services, Inc.


Laclede Investment LLC


Laclede Pipeline Company

Laclede Development Company

SM&P Utility Resources, Inc.

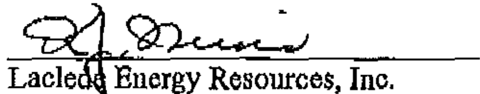

Laclede Energy Resources, Inc.

EXHIBIT A

Laclede Gas Company
The Laclede Group, Inc.
Laclede Investment LLC
Laclede Development Company
Laclede Pipeline Company
Laclede Energy Resources, Inc.
Laclede Venture Corp.
Laclede Gas Family Services, Inc.
SM&P Utility Resources, Inc. (Added effective January 28, 2002)

Gas Supply and Transportation Standards of Conduct

To assist in ensuring that energy-related transactions between Laclede Gas Company ("Laclede" or "Company") and its affiliates are conducted in a manner fully consistent with the interests of the Company's utility customers, including their interest in having such transactions priced and accounted for in a reasonable and appropriate manner, Laclede agrees to formalize and comply with the following standards of conduct and associated document requirements relating to such transactions:

A. Purchases of gas supplies for multi-month periods (purchases for longer than 1-month)

1. Laclede will acquire multi-month gas supplies in accordance with a competitive bidding process in which requests for proposals (RFP's) are submitted by Laclede to a list of eligible suppliers at the various supply locations connected to the pipelines on which Laclede holds firm transportation or through another competitive bidding process. For any exceptions to the competitive bid and award process, Laclede will have a documented process for the supply approval and award process, including (a) justification requirements, (b) authorization process, (c) contemporaneous documentation requirements (for internal Company information and external communications with suppliers), and (d) effective monitoring and controls.

2. Such RFP process shall be open to all gas suppliers who wish to bid.The intent is **to gain the broadest practical participation by eligible suppliers in submitting competitive supply bids for the supply location(s) where Laclede purchases gas.** Once such a process is reasonably developed and appropriately implemented and effectively monitored and controlled, the results of that process are intended to establish the fair market price for the purchase. Laclede shall provide with its annual CAM report submission an explanation of any credit, performance or other criteria that Laclede takes into consideration in determining which suppliers are sent RFPs as part of the RFP process.

3. In the event a gas supply contract for firm gas supply is awarded to an affiliate as a result of the RFP or other competitive bidding process, the affiliate shall be held to the same performance requirements as non-affiliated suppliers.

4. In the event a gas supply contract is awarded, Laclede shall maintain the following contemporaneous documentation: (a) any diversity, credit, or reliability-related volume limitations placed on the maximum volumes Laclede will purchase from an individual supplier or from any one supplier on a specific pipeline (broken down by baseload, combo, and swing); (b) an explanation of the diversity, credit and/or reliability-related reasons for imposing such limitations; (c) a description of the process used to transmit the

supply request to all eligible suppliers, evaluate bids, and negotiate final prices and terms; (d) a list of all suppliers that were sent each RFP;(e) a complete summary of all bids received and all prices accepted, together with copies of all underlying documents, contracts and communications; (f) a summary and explanation of suppliers disqualified for credit, performance or other criteria, and (g) a copy of the policy or procedure employed by Laclede for awarding contracts in instances where an affiliate and an unaffiliated supplier have offered identical pricing terms. For phone calls or texts, Laclede shall maintain contemporaneous logs documenting the discussions and decisions.

5. In the event a gas supply contract is awarded to an affiliate at a location in which no other contracts were awarded, the Company shall maintain contemporaneous documentation showing that the affiliate's bid price was equal to or lower than the bids received from non-affiliated suppliers, and that any upward or downward adjustment in the final contract price was justified by changes in the market.

6. In the event a gas supply contract is awarded to an affiliate at a location at which Laclede also awarded gas supply contracts to non-affiliated suppliers, the Company shall maintain contemporaneous documentation showing that the price established under the contract awarded the affiliate was within or lower than the range of prices established under contracts awarded to entities other than the affiliate.

7. If the affiliate's bid price or contract price does not meet the criteria in paragraphs 5 or 6, Laclede may not award the gas supply contract to the affiliate, unless the Company can demonstrate and contemporaneously document that a more favorable bid was rejected for legitimate reasons relating to the rejected bidder or bidders' creditworthiness, performance history (or lack thereof), or other consideration bearing on the fitness and reliability of the bidder to provide the requested service.

8. In the interests of optimizing the competitive benefits of the RFP process, the RFP will permit suppliers to propose alternative ways of satisfying the basic quantity, reliability, delivery and pricing terms of the RFP in addition to those specifically contemplated by the RFP, provided that the RFP shall explicitly advise suppliers that proposing such alternatives is permissible. The RFP may also utilize ranges for such quantity, reliability, delivery and pricing terms. In the event any such alternative produces a supply arrangement that is at least as favorable in its basic terms as other initial bids received by the Company during the RFP process then there shall be no need to rebid the proposed supply arrangement. In the event the Company itself makes a material change in the basic quantity, reliability, delivery or pricing terms of the RFP, or changes the range applicable to such terms, after initial bids have been received then the proposed supply arrangement shall be rebid.

B. Short term purchases of gas supply (one month or less)

1. The Company shall maintain contemporaneous documentation sufficient to establish that its short-term purchases of gas supply are acquired in accordance with a competitive bidding process, taking into account the terms and conditions, location and time at which the purchase was made.

2. The Company shall, within the next six months, develop a documented information exchange process where eligible suppliers will be notified of gas supplies that the Company may wish to purchase on a given day(s), and/or suppliers notify Laclede of supply and prices each is willing to offer. Such process may rely on instant messaging, emails, telephone calls, postings on a Company-developed website, awards made on an electronic trading platform (not just price discovery),or some other mechanism to notify bidders and/or Laclede. The intent is **to gain the broadest practical participation by eligible suppliers in submitting competitive supply bids for the supply location(s) where Laclede purchases gas**. Once such a process is reasonably developed and appropriately implemented and effectively monitored and controlled, the results of that process are intended to establish the fair market price for the purchase.

3. Emergency short term purchases of gas supply may also be made without following the competitive bidding procedure if necessitated by supply reliability considerations, provided that such purchases and the emergency circumstances are documented. Emergency conditions will include, but not be limited to, natural disasters, extreme weather events, well freeze-offs, curtailment of pipeline transportation or storage services, failure of supply, damage to or breakdown of Company facilities, changes in deliveries to the Company's take points that are beyond the Company's control, and other similar or unforeseen events affecting the availability of gas supplies. In the event short term purchases of gas supply are made on an emergency basis, nothing shall be construed as precluding Staff or OPC from raising an issue regarding the reasonableness of the emergency circumstances claimed by the Company and their effect on the propriety of the transaction.

4. For each and every gas supply inquiry and/or award, Laclede shall maintain the following contemporaneous documentation: (a) any diversity, credit, or reliability-related volume limitations placed on the maximum volumes Laclede will purchase from an individual supplier or from any one supplier on a specific pipeline; (b) an explanation of the diversity, credit, and/or reliability-related reasons for imposing such limitations; (c) a description of the process used to transmit and/or receive supply notifications to eligible suppliers, evaluate bids/responses, and negotiate final prices and terms; (d) copies of all written communications and descriptions of all unwritten communications that solicit bids from suppliers; (e) a list of all suppliers that were notified of Laclede's gas supply needs;(f) copies of all bids/responses/ inquiries received and all prices accepted, together with copies of all underlying

documents, contracts and communications; (g) a list of all suppliers disqualified for credit, performance or other criteria along with an explanation of the basis for each disqualification; and (h) a copy of the policy or procedure employed by Laclede for awarding contracts in instances where an affiliate and an unaffiliated supplier have offered identical pricing terms. For phone calls or texts, Laclede shall maintain contemporaneous logs documenting the inquiries, discussions and decisions.

C. Sales of gas supply also referred to as Off-System-Sales (OSS)

1. The Company shall maintain contemporaneous documentation sufficient to establish that its sales of gas were made at the fair market price for comparable sales, taking into account the terms and conditions, location and time at which the sale was made. The fair market price shall be determined pursuant to the process described below and any amount received for gas must be sufficient to cover: (i) the highest Cost of Gas Supply (CGS) on the pipeline on which the sale is made, as determined by the CGS schedule referenced in Laclede Gas Company's OSS tariff and as adjusted for any documented exceptions as permitted by such tariff; plus (ii) make some positive contribution to Laclede Gas Company's fixed gas supply costs.

2. The Company shall, within the next six months, develop a documented information exchange process where eligible bidders/buyers will be notified of gas supplies that the Company may have for sale on a given day(s). Such process may rely on instant messaging, emails, telephone calls, postings on a Company-developed website, awards made on an electronic trading platform (not just price discovery)or some other mechanism to notify bidders/potential gas buyers. The intent is **to gain the greatest reduction in gas costs for Laclede's customers consistent with maintaining a reliable supply of gas**. Once such a process is reasonably developed and appropriately implemented and effectively monitored and controlled, the results of that process are intended to establish the fair market price for the sale. For phone calls or texts, Laclede shall maintain contemporaneous logs documenting the inquiries, discussions and decisions.

3. **Unsolicited OSS Requests**— Laclede shall only accommodate unsolicited OSS requests where the Company can operationally provide such supplies without incurring any known penalty or detriment. Laclede shall maintain contemporaneous logs of all instances identifying where it has accommodated and/or refused such requests, including: the identity of the requesting counter-party; the date the request was made; the pricing and quantity of the gas supply requested; the awarded pricing, quantity, receipt/deliver point(s); and any other terms.

D. Releases of transportation or storage capacity by Laclede

1. All Laclede releases of pipeline transportation or storage capacity to an affiliate, including prearranged releases, must be effectuated by posting the release as biddable on the applicable pipeline's Electronic Bulletin Board ("EBB"). The Company shall maintain contemporaneous documentation sufficient to show that such release was made to an affiliate at the highest bid price (the posted release price is considered a bid price), on the pipeline's EBB for that release and that the amount received by the Company was at least sufficient to make a contribution to the Company's fixed pipeline reservation costs.

2. For pre-arranged releases to an affiliate of greater than a month and less than a year, the pre-arranged transaction shall be posted for two consecutive daily posting periods.

E. **Purchases of transportation and storage capacity from the capacity release market by Laclede** – All Laclede purchases of pipeline transportation or storage capacity from an affiliate must be effectuated by releasing and bidding for the capacity on the applicable pipeline's EBB. Laclede shall maintain contemporaneous documentation sufficient to show that the purchase price paid for such capacity was equal to or lower than the price of other comparable transportation alternatives available to the Company to meet the same resource needs. Laclede shall maintain contemporaneous documentation sufficient to show that the affiliate was given no preferential treatment over non-affiliates. Resource needs will be fully documented by the Company and subject to review.

F. **Purchase of unsolicited gas supply** — Laclede shall only consider accommodating unsolicited requests for short-term purchase of gas supply where the Company can operationally take such supplies without incurring any known penalty or detriment. Laclede shall maintain a contemporaneous log of all instances identifying where it has accommodated and/or refused such requests, including: the identity of the requesting supplier; the date the request was made; the pricing and quantity of the gas supply offered; the awarded pricing, quantity, receipt/delivery point(s); and any other terms.

G. **Negotiations with suppliers** – Laclede shall conduct all negotiations with its gas commodity and pipeline suppliers independently and shall at no time seek to tie the terms of any arrangement to any action on the part of the other party that would favor a Laclede affiliate. Nothing herein shall prevent either Laclede or an affiliate from jointly attending customer meetings, events or other functions where multiple customers or suppliers are also present.

H. **Off-System Sales (OSS) and Capacity Release Protocols**

In recognition that markets for OSS and capacity releases can vary depending on weather and availability of supply and capacity options, and in recognition that Laclede holds firm capacity in areas not used to serve its native load and the reservation costs of that firm

capacity is charged to Laclede's customers, Laclede will routinely evaluate its processes for soliciting potential buyers to maximize net revenues for OSS and capacity releases.

Laclede will take necessary actions to assure reasonable participation by buyers of its OSS and capacity releases. Laclede will take necessary actions to assure documentation is developed and maintained to show compliance with its processes and procedures.

I. **Document Retention** – All documentation and records that must be maintained in accordance with the provisions of these Standards of Conduct shall be maintained for a minimum of six years.

J. **Future Revisions** – It is expressly understood that Laclede, the Staff, and the Office of the Public Counsel reserve the right to propose at any time prospective changes to these Standards of Conduct to reflect changing market conditions, the potential implementation of new regulatory or operational models for managing gas supply assets, or other developments that cannot be fully anticipated at this time. Any such change must be approved by the Commission before being implemented. See also Sections I. and V.C. of CAM.

K. **Asset Management Arrangements/Agreements** – The CAM and referenced Standards of Conduct do not pertain to Asset Management Arrangements/Agreements (AMAs).Accordingly, if Laclede Gas chooses to use one or more AMAs, Laclede Gas shall document fair market price and fully distributed cost as set forth in 4 CSR 240-40.015 and 40.016, unless and until changes to the CAM and these Standards of Conduct addressing AMAs are approved by the Commission.

Laclede Gas Company — For — Refer to Sheet No. 1
Name of Issuing Corporation or Municipality — Community, Town or City

SCHEDULE OF RATES

H. Sharing of Off-System Sales and Capacity Release Revenues

Effective October 1, 2007, the Company and its Firm Sales and Firm Transportation customers shall share the Off-System Sales margins and Capacity Release Revenues realized by the Company as follows:

Annual Off-System Sales Margins and Capacity Release Revenues	Firm Sales and Firm Transportation Customers Share	Company Share
First $2,000,000	85%*	15%*
Next $2,000,000	80%	20%
Next $2,000,000	75%	25%
Over $6,000,000	70%	30%

* From October 1, 2013 through September 30, 2016 the Customers Share and Company Share for this layer of margins and revenues shall be revised to 100% and 0%, respectively.

The customers' share of Off-System Sales margins and Capacity Release Revenues shall be credited to a separate Deferred Purchased Gas Cost account and any amounts greater than or less than the amounts used as a credit in the computation of the CPGA and LVTSS capacity reservation charges shall be adjusted in the Company's next succeeding ACA computation. Customers' share of Off-System Sales margins shall be allocated to firm sales and firm transportation customers based on the contribution that each customer class made to the recovery of the Company's gas supply demand charges and capacity reservation charges and in accordance with the CPGA components described in A.2.a. above and the volumes sold and/or transported to the applicable customer classifications during the twelve month period ending with the September revenue month. Customers' share of Capacity Release Revenues shall also be allocated to firm sales and firm transportation customers based on the contribution that each customer class made to the recovery of the Company's capacity reservation charges and in accordance with the CPGA components described in A.2.b. above and the volumes sold and/or transported to the applicable customer classifications during the twelve month period ending with the September revenue month.

DATE OF ISSUE — Month Day Year — DATE EFFECTIVE October 1, 2013 — Month Day Year

ISSUED BY M.C. Pendergast, Vice President, External Affairs, 720 Olive St., St. Louis, MO 63101
Name of Officer — Title — Address

Schedule EDF-06

Schedule EDF-06: Proposed Modifications to the Gas Supply and Transportation Standards of Conduct

The following changes are presented in redline to the current Sections A and B of the current Gas Supply and Transportation Standards of Conduct.

~~A~~I. Purchases of ~~gas supplies~~ transportation capacity for multi-month periods (purchases for longer than 1-month)

1. Laclede will acquire multi-month ~~gas supplies~~ transportation capacity in accordance with a competitive bidding process in which requests for proposals (RFP's) are submitted by Laclede to a list of eligible ~~suppliers~~ Transportation Service Providers currently connected to or able to directly connect to Laclede ~~at the various supply locations connected~~ or connected to the pipelines on which Laclede holds firm transportation or through another competitive bidding process. For any exceptions to the competitive bid and award process, Laclede will have a documented process for the supply approval and award process, including (a) justification requirements, (b) authorization process, (c) contemporaneous documentation requirements (for internal Company information and external communications with suppliers), and (d) effective monitoring and controls.

2. Such RFP process shall be open to all ~~gas suppliers~~ Transportation Service Providers who wish to bid. The intent is **to gain the broadest practical participation by eligible ~~suppliers~~ Transportation Service Providers in submitting competitive ~~supply~~ transportation capacity bids for the ~~supply location(s) where~~ transportation capacity Laclede ~~purchases gas~~ seeks to contract for, purchase, or otherwise acquire**. Once such a process is reasonably developed and appropriately implemented and effectively monitored and controlled, the results of that process are intended to establish the fair market price for the purchase. Laclede shall provide with its annual CAM report submission an explanation of any credit, performance or other criteria that Laclede takes into consideration in determining which ~~suppliers~~ Transportation Service Providers are sent RFPs as part of the RFP process.

3. In the event a ~~gas supply~~ transportation capacity contract for firm ~~gas supply~~ transportation capacity is awarded to an affiliate as a result of the RFP or other competitive bidding process, the affiliate shall be held to the same performance requirements as non-affiliated ~~suppliers~~ Transportation Service Providers.

4. In the event a ~~gas supply~~ transportation capacity contract is awarded, Laclede shall maintain the following contemporaneous documentation: (a) any diversity, credit, or reliability-related ~~volume~~ capacity limitations placed on the maximum ~~volumes~~ capacity Laclede will purchase from an individual ~~supplier~~ Transportation Service Provider ~~or from any one supplier on a specific pipeline (broken down by baseload, combo, and swing)~~; (b) an explanation of the diversity, credit and/or reliability-related reasons for imposing such limitations; (c) a description of the process used to transmit the ~~supply~~ transportation capacity request to all eligible ~~suppliers~~ Transportation Service Providers, evaluate bids, and negotiate final prices and terms; (d) a list of all ~~suppliers~~ Transportation Service Providers that were sent each RFP;(e) a complete summary of all bids received and all prices accepted, together with

copies of all underlying documents, contracts and communications; (f) a summary and explanation of ~~suppliers~~ Transportation Service Providers disqualified for credit, performance or other criteria, and (g) a copy of the policy or procedure employed by Laclede for awarding contracts in instances where an affiliate and an unaffiliated ~~supplier~~ Transportation Service Provider have offered identical pricing terms. For phone calls or texts, Laclede shall maintain contemporaneous logs documenting the discussions and decisions.

5. In the event a ~~gas supply~~ transportation capacity contract is awarded to an affiliate ~~at a location in~~ for a transportation capacity path between a receipt area and a delivery area over which no other contracts were awarded, the Company shall maintain contemporaneous documentation showing that the affiliate's bid price was equal to or lower than the bids received from non-affiliated suppliers, and that any upward or downward adjustment in the final contract price was justified by changes in the market.

6. In the event a ~~gas supply~~ transportation capacity contract is awarded to an affiliate ~~at a location at~~ for a transportation capacity path between a receipt area and a delivery area over which Laclede also awarded ~~gas supply~~ transportation capacity contract(s) to non-affiliated ~~suppliers~~ Transportation Service Providers, the Company shall maintain contemporaneous documentation showing that the price established under the contract awarded the affiliate was within or lower than the range of prices established under contracts awarded to entities other than the affiliate.

7. If the affiliate's bid price or contract price does not meet the criteria in paragraphs 5 or 6, Laclede may not award the ~~gas supply~~ transportation capacity contract to the affiliate, unless the Company can demonstrate and contemporaneously document that a more favorable bid was rejected for legitimate reasons relating to the rejected bidder or bidders' creditworthiness, performance history (or lack thereof), or other consideration bearing on the fitness and reliability of the bidder to provide the requested service.

8. In the interests of optimizing the competitive benefits of the RFP process, the RFP will permit ~~suppliers~~ Transportation Service Providers to propose alternative ways of satisfying the basic quantity, reliability, receipt, delivery and pricing terms of the RFP in addition to those specifically contemplated by the RFP, provided that the RFP shall explicitly advise ~~suppliers~~ Transportation Service Providers that proposing such alternatives is permissible. The RFP may also utilize ranges for such quantity, reliability, receipt, delivery and pricing terms. In the event any such alternative produces a supply arrangement that is at least as favorable in its basic terms as other initial bids received by the Company during the RFP process then there shall be no need to rebid the proposed supply arrangement. In the event the Company itself makes a material change in the basic quantity, reliability, receipt, delivery or pricing terms of the RFP, or changes the range applicable to such terms, after initial bids have been received then the proposed supply arrangement shall be rebid.

~~B~~J. Short term purchases of ~~gas supply~~ transportation capacity (one month or less)

1. The Company shall maintain contemporaneous documentation sufficient to establish that its short-term purchases of ~~gas supply~~ transportation capacity are acquired in accordance with a competitive bidding process, taking into account the terms and conditions, transportation capacity path between a receipt area and a delivery area ~~location~~ and time at which the purchase was made.

2. The Company shall, within the next six months, develop a documented information exchange process where eligible ~~suppliers~~ Transportation Service Providers will be notified of ~~gas supplies~~ transportation capacity that the Company may wish to purchase on a given day(s), and/or ~~suppliers~~ Transportation Service Providers notify Laclede of ~~supply~~ transportation capacity and prices each is willing to offer. Such process may rely on instant messaging, emails, telephone calls, postings on a Company-developed website, awards made on an electronic trading platform (not just price discovery),or some other mechanism to notify bidders and/or Laclede. The intent is **to gain the broadest practical participation by eligible ~~suppliers~~ Transportation Service Providers in submitting competitive ~~supply~~ transportation capacity bids for the ~~supply location(s) where~~ transportation capacity Laclede ~~purchases gas~~ seeks to contract for, purchase, or otherwise acquire**. Once such a process is reasonably developed and appropriately implemented and effectively monitored and controlled, the results of that process are intended to establish the fair market price for the purchase.

3. Emergency short term purchases of ~~supply~~ transportation capacity may also be made without following the competitive bidding procedure if necessitated by ~~supply~~ transportation capacity reliability considerations, provided that such purchases and the emergency circumstances are documented. Emergency conditions will include, but not be limited to, natural disasters, extreme weather events, well freeze-offs, curtailment of pipeline transportation or storage services, failure of supply, damage to or breakdown of Company facilities, changes in deliveries to the Company's take points that are beyond the Company's control, and other similar or unforeseen events affecting the availability of gas supplies. In the event short term purchases of ~~supply~~ transportation capacity are made on an emergency basis, nothing shall be construed as precluding Staff or OPC from raising an issue regarding the reasonableness of the emergency circumstances claimed by the Company and their effect on the propriety of the transaction.

4. For each and every ~~supply~~ transportation capacity inquiry and/or award, Laclede shall maintain the following contemporaneous documentation: (a) any diversity, credit, or reliability related volume limitations placed on the maximum volumes Laclede will purchase from an individual ~~supplier~~ Transportation Service Provider ~~or from any one supplier on a specific pipeline~~; (b) an explanation of the diversity, credit, and/or reliability-related reasons for imposing such limitations; (c) a description of the process used to transmit and/or receive ~~supply~~ transportation capacity notifications to eligible ~~suppliers~~ Transportation Service Providers, evaluate bids/responses, and negotiate final prices and terms; (d) copies of all written communications and descriptions of all unwritten communications that solicit bids from ~~suppliers~~ Transportation Service Providers; (e) a list of all ~~suppliers~~ Transportation Service Providers that were notified of Laclede's ~~gas supply~~ transportation capacity needs;(f)

copies of all bids/responses/ inquiries received and all prices accepted, together with copies of all underlying documents, contracts and communications; (g) a list of all ~~suppliers~~ Transportation Service Providers disqualified for credit, performance or other criteria along with an explanation of the basis for each disqualification; and (h) a copy of the policy or procedure employed by Laclede for awarding contracts in instances where an affiliate and an unaffiliated ~~supplier~~ Transportation Service Provider have offered identical pricing terms. For phone calls or texts, Laclede shall maintain contemporaneous logs documenting the inquiries, discussions and decisions.

Schedule EDF-07

Spire STL Pipeline LLC Announces

Open Season for Firm Natural Gas Transportation Service

August 1, 2016

Overview

Spire STL Pipeline LLC ("Spire") announces the commencement of an open season ("Open Season") for firm natural gas transportation service on a proposed new interstate natural gas pipeline that will serve the energy needs of residential, commercial and industrial customers in the St. Louis metropolitan area and surrounding counties in Missouri and southwest Illinois ("Project"). The Project as proposed will consist of approximately 60 miles of new pipeline that will receive gas at the Rockies Express Pipeline LLC ("REX") interstate natural gas pipeline in Scott County, Illinois and terminate at a bi-directional point of interconnection with the Enable Mississippi River Transmission, LLC ("MRT") interstate natural gas pipeline in St. Louis County, Missouri. Proposed delivery points include the interconnections with MRT and Laclede Gas Company ("LGC") in Missouri and Panhandle Eastern Pipe Line Company, LLC ("Panhandle") in Illinois. In addition, Spire invites proposals for additional points of delivery that are supported by firm transportation service subscriptions.

The Project is expected to be ready for commercial service on November 1, 2018.

This Open Season will commence on Monday, August 1, 2016 and close at 5:00 p.m. CDT on Friday, August 19, 2016 ("Open Season Period"). To be considered for service on the new pipeline, interested parties ("Prospective Shippers") must submit via email a completed non-binding Service Request Form and information regarding creditworthiness, before the Open Season Period ends, to:

Mr. Scott Jaskowiak
Vice President
Spire STL Pipeline LLC
314-516-8588
STLPipelineBids@SpireEnergy.com

To the extent that capacity remains available in the Project following completion of negotiations with all qualifying Prospective Shippers in the Open Season, Spire reserves the right to negotiate mutually acceptable precedent agreements with any potential shippers for the remaining capacity upon request, irrespective of deadlines herein for execution of precedent agreements.

General Description of Project

As proposed, the Project will consist of approximately 60 miles of new build 24-inch-diameter steel pipeline originating at an interconnection with REX in Scott County, Illinois, extending south through Greene and Jersey Counties in Illinois before crossing the Mississippi River and extending east in St. Charles County, Missouri until crossing the Missouri River and tying into an existing 9-mile, 20-inch-diameter steel transmission pipeline ("Line 880") in St. Louis County, Missouri that is currently owned and operated by Spire's local distribution company affiliate, LGC. As part of the proposed Project and subject to LGC's receipt of approval from the Missouri Public Service Commission ("MPSC"), Spire plans to purchase from LGC Line 880, which will be used to connect the new build part of the Project to the MRT pipeline in St. Louis County, Missouri. The total length of the entire Project will be approximately 70 miles.

The purpose of the Project is to meet the needs of the Project's Foundation Shipper, LGC, as well as the needs of other shippers in eastern Missouri and southwest Illinois. In particular, the Project will (a) provide an additional source of natural gas to the St. Louis metropolitan area to support LGC's local distribution service obligations to its approximately 650,000 residential, commercial, and industrial customers in Missouri; (b) provide shippers with access to cost effective natural gas from the prolific Appalachian Basin; (c) support enhanced natural gas transportation reliability for the region that the pipeline will serve; (d) create new commercial and industrial development opportunities in the St. Louis metropolitan area; and (e) provide opportunities for new natural gas infrastructure in southwest Illinois that will help support future commercial and industrial growth as well as residential natural gas service.

The overall design capacity of the pipeline is expected to be 400,000 dekatherms per day ("Dth/d"). The final size and scope of the Project and the amount of capacity to be made available will be fully defined based on definitive commitments reached under precedent agreements with Prospective Shippers following the Open Season. Spire reserves the right to increase the capacity of the Project or to prorate bids received prior to execution of definitive precedent agreements based on maximum available capacity.

Spire will be a natural gas company subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC") under the Natural Gas Act. The offering of transportation services as contemplated in this Open Season is explicitly subject to and conditioned upon, among other things, Spire's receipt of all applicable regulatory approvals, from FERC and other governmental authorities with jurisdiction over the Project, in form and substance acceptable to Spire.

Potential Receipt and Delivery Points

As proposed, the Project will include the following receipt and delivery points: Primary receipt point rights will be available at REX and the interconnection of Line 880 with MRT known as Chain of Rocks. Primary delivery point rights are currently anticipated to include various points of interconnection between Spire and LGC as well as the interconnection of Line 880 with MRT at Chain of Rocks and the planned interconnect in southwest Illinois with Panhandle. Primary delivery rights at Chain of Rocks are anticipated to be fully subscribed by Spire's Foundation Shipper(s).

Interconnect	**[R] Receipt [D] Delivery [B] Bi-directional**
REX	R
Panhandle	D
LGC - Laclede Aggregate	D

MRT - Chain of Rocks	B
Additional Delivery Points - TBD	D

Spire invites proposals for other potential delivery points along the proposed route to serve firm transportation service needs. Spire will consider such proposals as part of an otherwise qualifying and acceptable request for service on a not unduly discriminatory basis and to the extent such additional delivery points do not adversely affect project operations or the provision of firm service to any Prospective Shipper that has executed a precedent agreement. Prospective Shippers will be responsible for confirming availability of their requested receipt and delivery points with the point operators.

Description of Service Type and Rates

As a FERC-jurisdictional interstate natural gas pipeline, the applicability and character of firm transportation service to be offered by Spire pursuant to the terms of this Open Season will be governed by the terms and conditions of Spire's FERC NGA Gas Tariff. While this Open Season is requesting bids for firm transportation service, Spire may also request authorization from FERC to provide interruptible transportation service, interruptible park and loan service, and potentially other services, as well.

A shipper transporting gas under a firm transportation service agreement will have firm rights to the agreed upon maximum daily transportation quantity ("MDTQ").

A cost-based recourse rate will be available for the firm transportation service provided by Spire under the Project. The initial daily maximum recourse reservation rate for firm transportation service is currently estimated to be approximately $0.23 to $0.27 per Dth/d. The actual maximum recourse reservation rate may be higher or lower than this estimate, and will be subject to adjustment pursuant to proceedings under the Natural Gas Act. Spire makes no representation or warranty of any kind at this time as to the actual maximum recourse reservation rate that will apply to firm transportation service.

In addition to the reservation rate, firm transportation shippers will be responsible for the applicable usage rate, any applicable surcharges approved by FERC for firm transportation service, and the applicable fuel and losses retention factor (currently anticipated to be based solely on lost and unaccounted for volumes, to be determined through a tariff-governed tracking mechanism).

In addition to the recourse rates, Spire will also consider entering into mutually agreeable negotiated rate agreements, which agreements must be finalized and executed in conjunction with the precedent agreement.

Contract Terms for Transportation Services

Subject to a minimum term requirement of 15 years for Prospective Shippers wishing to receive Foundation Shipper status, a 5-year minimum term is required for a service request to be considered a qualifying service request in the Open Season. While Spire may reject any service requests with shorter terms, it reserves the right to consider any such shorter-term service requests.

Foundation Shipper Status and Benefits

For agreeing to a contract term and level of capacity that will enable Spire to proceed with the Project, Spire proposes to offer appropriate rate and other incentives, as described here, to a category of Prospective Shipper known as "Foundation Shipper." To be eligible for Foundation Shipper status, a Prospective Shipper must subscribe to a minimum of 150,000 Dth/d of firm transportation service on the Project for a term of not less than 15 years, commencing on the in-service date of the Project.

Foundation Shippers will be exempted from proration of their capacity subscriptions, unless prorationing is necessary to accommodate other Foundation Shippers. In addition, a Foundation Shipper:

(a) Will have the right to enter into, at the conclusion of the primary term of its firm transportation service agreement, up to two successive unilateral five-year contract term extensions, with the option to elect to maintain the same negotiated rate in effect during the primary term or to change to the then-effective maximum recourse rate during those term extensions;

(b) Will be eligible for a contractual right of first refusal in addition to the unilateral contract term extensions;

(c) Will be offered risk sharing associated with potential Project cost changes;

(d) Will have the right to obtain any foundation or anchor shipper status available in the event of any Spire expansion project;

(e) Will have the right to reduce its MDTQ proportionately if Spire directly connects its pipeline facilities to an existing natural gas distribution customer of a Foundation Shipper that is a local distribution company; and

(f) May receive other rate and rate-related benefits not available to non-Foundation Shippers.

Targeted In-Service Date

The Project is expected to be in service starting on November 1, 2018.

Creditworthiness

To be eligible to execute a binding precedent agreement with Spire, a Prospective Shipper must meet certain minimum financial criteria. Specifically, a qualifying Prospective Shipper must demonstrate that it satisfies one of the creditworthiness requirements set forth below (the "Creditworthiness Requirements"):

(a) Prospective Shipper has a credit rating of at least BBB- by S&P, or Baa3 by Moody's, or any equivalent credit rating by any other rating agency to which the Parties may agree ("Investment Grade"); provided, however, that in the event that an entity has a credit rating from more than one such agency, such entity shall be deemed to have an Investment Grade credit rating only if all such credit ratings are Investment Grade credit ratings; or

(b) Prospective Shipper furnishes to Spire a guaranty from a parent company or an affiliated third party that is Investment Grade, where the guaranty (1) extends for the term of the precedent agreement and the firm transportation service agreement, (2) guarantees all payment obligations of Prospective Shipper under the precedent agreement and the firm transportation service agreement, and (3) is in a form reasonably acceptable to Spire; or

(c) At Prospective Shipper's cost, Prospective Shipper furnishes to Spire a standby irrevocable letter of credit (in a form reasonably acceptable to Spire) from a qualified institution (the "Letter of Credit") in an amount up to Prospective Shipper's proportionate share (as prorated based on the MDTQ among all customers that have a precedent agreement in effect with Spire and/or firm transportation service agreement for service on the Project that will be in effect on the In-Service Date) of the total costs associated with the Project as estimated by Spire, less depreciation following the in-service date; but not to exceed the net present value of Prospective Shipper's reservation rate responsibility for the primary term of its firm transportation service agreement.

Service Request Form and Follow-Up Process

In order for a service request to be accepted for evaluation, a Prospective Shipper must complete the attached Service Request Form. Prospective Shippers submitting a proposal will be expressing a commitment to contract for firm transportation service on the Project, subject to the negotiation and execution of a precedent agreement with Spire. All proposals received will be treated as confidential, and will not be shared with other potential shippers.

Upon execution of Spire's confidentiality agreement, any interested party may receive a form precedent agreement for the Project upon request.

Once the Open Season Period has ended, Spire will begin the process of negotiating binding precedent agreements and finalizing the Project design and capacity. Any Prospective Shipper that wishes to enter into a binding precedent agreement with Spire must provide evidence that satisfies the creditworthiness requirements described above.

After concluding commercial negotiation of all precedent agreements, Spire will again evaluate the total capacity requested for the proposed Project. If the total capacity requested exceeds the planned scope of the Project, Spire may revise the scope of the Project and/or allocate the available transportation capacity under the Project. If Spire allocates the available transportation capacity under the Project, then the capacity will be allocated as follows:

(a) If requests from Foundation Shippers exceed the Project capacity, all capacity will be allocated to Foundation Shippers on a pro rata basis based on their requested capacity.

(b) If requests from Foundation Shippers are less than the Project capacity, any remaining capacity after Foundation Shippers receive their full request will be allocated to the other Prospective Shippers on a not unduly discriminatory basis, which may include a net present value allocation based on rate, term, and quantity of those service requests or any combination of service requests with the highest net present value receiving priority to the capacity.

Contact Information

The information provided in this announcement is intended to assist Prospective Shippers in preparing the attached Service Request Form. All inquiries or requests for additional information or clarifications should be directed to:

Mr. Scott Jaskowiak
Vice President
Spire STL Pipeline LLC
314-516-8588
Scott.Jaskowiak@SpireEnergy.com

Reservations and Limitations

Spire reserves the right to decline to proceed with the Project, to change its route or otherwise modify it, and/or to increase or decrease the capacity of the Project. Spire also reserves the right to reject any and all bids that do not satisfy the requirements set forth in this Open Season announcement, modify the terms of the Open Season or extend the Open Season to accommodate market interest. Without limiting the foregoing, Spire may, but is not required to, reject any request for service in which the Service Request Form is incomplete, is inconsistent with the terms and conditions outlined in this Open Season announcement, contains additional or modified terms, requests rates that do not meet Spire's financial objectives, or is otherwise deficient in any respect. Spire also reserves the right to reject

requests for service in the event Prospective Shippers are unable to meet applicable creditworthiness requirements. No request for service shall be binding upon Spire unless and until duly authorized representatives of both a Prospective Shipper and Spire have executed a binding precedent agreement. Spire reserves the right to reject any Prospective Shipper's valid Request for Service in the event Spire and that Prospective Shipper have not executed a binding precedent agreement within thirty (30) days following the end of the Open Season.

Exhibit A – Project Map

Spire STL Pipeline

Rockies Express Pipeline

Scott

Morgan

Pike

Greene

Macoupin

Jersey

Calhoun

Madison

St. Charles County

St. Louis County

Laclede Gas Company Storage

Enable MRT Pipeline

Schedule EDF-08

Laclede Gas Company / Missouri Gas Energy
GR-2017-0215 / GR-2017-0216

Response to EDF Data Request 006

Question:

Refer to Scott Weitzel's testimony at page 28, lines 9-13, which provides that the charges for transporting and storing natural gas supplies totaled nearly $200 million for the two companies in the most recent ACA periods.
a) Does the Company intend to seek to recover the costs associated with its Spire Pipeline LLC transportation agreement through the ACA?
b) If yes, when will the Company file to recover the costs associated with its Spire Pipeline LLC transportation agreement?
c) If the Company intends to seek to recover the costs associated with its Spire Pipeline LLC transportation agreement through the ACA, by how much will this $200 million figure increase on an annual basis for the duration of the agreement?

Response:

a) It plans to seek recovery through its purchased gas adjustment clause (PGA), including the ACA provisions of the clause. This is the same manner that it recovers other pipeline capacity costs incurred to service customers.

b) It is expected that such costs would be reflected in LAC's PGA/ACA at the time Spire STL Pipeline becomes operational and begins to provide transportation to service to LAC and other customers. That date is subject to the outcome of proceedings before the Federal Energy Regulatory Commission and completion of all required permitting, construction and start up activities. Accordingly, a firm date cannot be provided at this time, but is expected to occur beginning with the first PGE filing made after the Spire STL Pipeline is in service and providing transportation service to Laclede Gas Company.

c) The specific impact of the inclusion of Spire STL Pipeline's transportation charges in LAC's PGA/ACA will depend on a variety of factors to be determined. Accordingly, a definite amount cannot be provided at this time. Any consideration of the impact of Spire STL Pipeline LLC, however, will also need to be put into the larger and more meaningful context of its impact on the overall cost of delivered gas to LAC as a result of greater supply diversity and the opportunities such diversity creates to access supplies from sources that may be more favorably priced, as well as its impact on enhancing supply reliability.

Signed by: Glenn Buck

Schedule EDF-09

Electric Utilities

MANAGEMENT MEETING

Research Analysts
Michael Weinstein
212 325 0897
w.weinstein@credit-suisse.com
Khanh Nguyen, CFA
212 538 3524
khanh.l.nguyen@credit-suisse.com
Radi Sultan
212 538 8137
radi.sultan@credit-suisse.com

AGA Conference Takeaways

Our Take: Coming right off an earnings season, many companies focused more on providing more definition to current capital plans with broad strokes for future opportunities beyond their current (mostly 5-year) programs (NJR, SR, CMS, DTE, DUK, BKH). Many management teams also agree that M&A in the space, while still definitely ongoing, remains slowed by uncertainty over tax reform. Most would go further to say that valuations look stretched, even for the more acquisitive ones like BKH, NWE and SR. Actually, SR notably dropped the language "acquiring and integrating gas utilities" to a number two priority from number one previously. Pipeline and midstream investments look increasingly popular for their low risk and steady earnings profile (ED, SR, NJR). We also highlight SO's coming GRAM mechanism (as well as major announcements for both the Kemper and Vogtle projects on June 3), PennEast (NJR) and ACP pipeline (DUK, D) approvals in the Summer and through 2H, and grid modernization filings this fall in Michigan (DTE, CMS). We are also incrementally more optimistic on Millstone legislation in CT (D) and agree with D that overturning the suspension of biennial reviews in VA is a heavy lift with low probability of success.

See our detailed notes from the conference enclosed for each of our 13 meetings in this order: **SO, ED, AVA, NJR, SR, CMS, DUK, NWE, BKH, D, DTE, WEC, and SRE**. Don't hesitate to contact the team with any questions.

Our team has worked hard to initiate coverage this year. *As we continue expanding our coverage and offerings, we would like your vote in this year's Institutional Investor All America Research Survey.* ***Your vote is appreciated - please click here to request a ballot if you don't already have one – thank you.***

Utilities 1Q17 Earnings Recap – The Power is On

Weeklies

- Things We've Learned this Week – 5/21
- Things We've Learned this Week – 5/14

Recent Company Notes

Outperforms

- EXC (TP: $40.0) – Capacity, ZEC Payments Coming into Focus
- D (TP: $81.0) – Positive Catalysts Dominate 2017/18
- BKH (TP: $73.0) – Synergizing the Balance Sheet

Underperforms

DISCLOSURE APPENDIX AT THE BACK OF THIS REPORT CONTAINS IMPORTANT DISCLOSURES, ANALYST CERTIFICATIONS, LEGAL ENTITY DISCLOSURE AND THE STATUS OF NON-US ANALYSTS. US Disclosure: Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

- ED (TP: $71.0) – Cost Cutting Prioritized for 2017
- SO (TP: $50.0) – The Nuclear Option Awaits

Neutrals

- DUK (TP: $86.0) – Carolinas on Their Minds
- CMS (TP: $48.0) – Getting Clean and Going Lean
- DTE (TP: $106.0) – Staying Firm on Guidance & Growth Trajectory
- ES (TP: $59.0) – Smooth Sailing, but Fairly Valued
- NWE (TP: $62.0) – A Ratecase Runs Through It
- SR (TP: $71.0) – Moving in the Right Direction

Spire (SR)

- **Missouri legislature moving quickly, but on a limited-issue bill.** The Missouri House may review authorizing discounted electric rates for steel and aluminum production plants as early as today after passing through committee last night. However, it appears that sections of the bill that would have allowed regulators to consider other rate setting initiatives. See below for the relevant bills being considered in this session and see our 5/22 note "So You're Telling Me There's a Chance..." for further details.

  HB 1 Rone, Don
  Gives the public service commission authority to approve certain special utility rates for an aluminum smelting facility or a steel works facility under certain circumstances(LR# 2415H.01I)
  HB 2 Merideth, Peter
  Gives the public service commission authority to approve certain special utility rates for industrial energy users under certain circumstances(LR# 2410H.01I)
  HB 3 Miller, Rocky
  Gives the public service commission authority to approve certain special utility rates under certain circumstances(LR# 2424H.01I)
  HB 4 Korman, Bart
  Changes the laws relating to requirements for utilities regarding sources generating electricity(LR# 2406H.02I)
  HB 5 Barnes, Jay
  Gives the public service commission authority to approve certain special utility rates for an aluminum smelting facility or a steel works facility under certain circumstances(LR# 2425H.01I)

- **Missouri ratecase ongoing, STL on track.** No update to the Missouri ratecases – while the procedural schedule has been agreed upon, it has not been released yet. Still expect September testimony with a ratebase update (to adjust for a Sep 30, 2017 test year-end) but don't expect to hear anything from the intervenors until they have given their testimony. SR has a history of settled ratecases but the earliest that SR thinks settlement talks could materialize is after testimony in the Dec 2017 – Jan 2018 timeframe. A final decision from the Missouri PSC is expected in the Jan – Feb timeframe. SR expects a ratebase at the Sep 30 test year update of ~$2.1B from the filed $2.025B and a capital structure of 54% equity from the filed 57.2% equity due to debt funding commitments. STL pipeline remains on time and on budget, there is community support for the project and the pipeline crosses mostly farmland which means it has avoided major opposition. The company does not anticipate any issues with obtaining FERC or other approvals for the pipeline.

- **A new stance towards M&A, a pipeline focus.** The company dropped the language "acquiring and integrating gas utilities" to a number two priority from number one previously and dropped the "utility" line to indicate an interest in doing more pipeline investments similar to the STL pipeline. In past earnings calls the company has noted that premiums in the gas LDC space were high and that they would exercise prudence in any acquisition so this represents a notable shift in strategy. SR is currently looking at the Western side of the state for more pipeline projects/acquisitions focused on possible supply, transportation, or storage projects. For projects the company intends to look towards St. Louis first, then to Kansas City and then farther south to Alabama (in terms of priorities of focus).

- **Capex run rates after STL pipeline.** Run rates for pipe infrastructure replacement programs are running $310-$320M annually, with about $120M in Alabama with the remaining split between MG&E and LaClede. The Missouri programs are covered by ISRS while the Alabama portion is covered through the state's RSE mechanism, ultimately leading to 77% of SR's spend recovered with minimal regulatory lag. An additional 9% from STL Pipeline is also contemporaneous, for a total 86%. The

company's 5-year capex forecast through 2021 also includes about $100-$110M of non-tracked capex, with includes automated meters and programs for enhanced customer service (Customer Connect) as well as new opportunities for heating/cooling appliances.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase its Revenues for Gas Service	)))	**Case No. GR-2017-0215**
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase its Revenues for Gas Service	)))	**Case No. GR-2017-0216**

AFFIDAVIT

STATE OF MASSACHUSETTS	)	
	)	SS.
COUNTY OF ESSEX	)	

Gregory M. Lander, of lawful age, being first duly sworn, deposes and states:

1. My name is Gregory M. Lander. I am President of Skipping Stone, LLC. My business address is 83 Pine Street, Suite 101, West Peabody, MA 01960.
2. Attached hereto and made a part hereof for all purposes is my direct testimony on behalf of the Environmental Defense Fund.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Gregory M. Lander

Subscribed and sworn to me this 6th day of September, 2017.

Notary Public

ANNE W. HOOKER
Notary Public
Massachusetts
Commission Expires Apr 20, 2018