

**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

**In the Matter of the Merger of Southern)
Company and AGL Resources, Inc.) BPU Docket No. GM15101196**

**DIRECT TESTIMONY OF DAVID E. DISMUKES, PH.D.
ON BEHALF OF DIVISION OF RATE COUNSEL**

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1 provides my academic vitae, which includes a full listing of my publications, presentations,
2 pre-filed expert witness testimony, expert reports, expert legislative testimony, and
3 affidavits.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. I have been retained by the New Jersey Division of Rate Counsel (“Rate Counsel”) to
6 provide an expert opinion to the New Jersey Board of Public Utilities (“BPU” or the
7 “Board”) on the public and regulatory policy issues associated with the proposed merger
8 of The Southern Company (“Southern”) and AGL Resources, Inc. (“AGLR”) (collectively,
9 referred to as “Joint Petitioners”) in their Joint Petition filed on October 16, 2015. The
10 proposed merger would result in Southern becoming the ultimate corporate parent of
11 Pivotal Utility Holdings, Inc. d/b/a/ Elizabethtown Gas (“ETG”) a New Jersey natural gas
12 public utility. My testimony will address the following topics: overview of the proposed
13 merger; New Jersey merger/acquisition standards; proposed ratepayer benefits; proposed
14 ratepayer merger credit; merger synergy benefits; proposed infrastructure and reliability
15 benefits; and my conclusions and recommendations. I will also introduce other Rate
16 Counsel witnesses filing direct testimony in this matter and summarize their expert
17 positions.

18 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

19 A. My balance of testimony is organized into the following sections:

- 20 • Section II: Overview of Recommendations
- 21 • Section III: Overview of Proposed Merger Transaction
- 22 • Section IV: Proposed Ratepayer Benefits
- 23 • Section V: Ratepayer Merger Credit

- Section VI: Infrastructure and Reliability Commitments
- Section VII: Summary of Recommendations

II. OVERVIEW OF RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. I recommend that the Board reject the proposed merger as filed. Quite simply, the merger commitments made by the Joint Petitioners do not provide ratepayers with an adequate level of new and incremental benefits as required by the Board’s merger standards of review. Further, the Joint Petitioners have made a number of merger commitments that shift a considerable amount of merger-related performance risk away from the utilities and onto New Jersey ratepayers. Therefore, the Board should reject the proposed merger offered by the Joint Petitioners as not being in the public interest.

Q. COULD THE MERGER BE BROUGHT INTO THE PUBLIC INTEREST WITH CERTAIN MODIFICATIONS?

A. Yes, the proposed merger could be made consistent with the public interest if it were modified in such a fashion that (1) resulted in new and substantial incremental ratepayer benefits that would not arise but for the merger and (2) substantially reduced the unnecessary regulatory, financial, and operating risks being imposed on ratepayers and ETG’s employees under the Joint Petitioners’ current proposal. These modifications, and the Rate Counsel witnesses sponsoring these alternative recommendations (identified in parentheses below), include:

Shareholder Financial Contribution Commitments

- The \$6 million ratepayer credit proposed by Joint Petitioners, which will be passed along through ETG’s Asset Management Agreement (“AMA”) with an affiliate, is too small, particularly relative to the performance risks being imposed on ratepayers as a result of this merger. This ratepayer credit amounts to less than

1 four percent of ETG’s pro-rata share of the transaction’s acquisition premium,
2 which is over \$155 million. The rate credit to customers should be significantly
3 large, and it should be a direct credit on customers’ bills and not passed through the
4 AMA, since not all customers would share in a credit passed through the AMA.
5 (Dismukes)

- 6 • The Joint Petitioners should agree to a most favored nations clause similar to the
7 one approved by the Board in the Exelon-PHI merger. (Dismukes)

8 **Corporate Governance Commitments**

- 9 • AGLR’s separate, outside Board of Directors should be granted complete
10 autonomy by Southern’s Board of Directors. Alternatively, Joint Petitioners should
11 maintain appropriate proportional representation of AGLR’s directors on
12 Southern’s Board of Directors. (Peterson)
- 13 • Joint Petitioners should maintain the outside Board of Directors for AGLR
14 indefinitely instead of “at least five years” after the merger. (Peterson)
- 15 • Joint Petitioners should be required to obtain Board approval for any change in the
16 organizational structure of AGLR’s Board of Directors. (Peterson)

17 **Employment and New Jersey Presence**

- 18 • Joint Petitioners should maintain at least 300 ETG employees in the State of New
19 Jersey for a minimum of five years. (Mugrace)
- 20 • Joint Petitioners should maintain the ETG call center in its current location in
21 Union, New Jersey permanently. (Mugrace)
- 22 • Joint Petitioners should maintain ETG’s two walk-in centers in Elizabeth and Perth
23 Amboy indefinitely, subject to Board approval to relocate or close any of these
24 centers. (Mugrace)
- 25 • Joint Petitioners should maintain the Customer Service Centers and the level of
26 employees located in the following areas of the Company’s service territory
27 indefinitely, subject to Board approval of changes to staffing and any relocation or
28 closure. (Mugrace)
 - 29 ○ Stewartsville, New Jersey – 35 employees
 - 30 ○ Flemington, New Jersey – 14 employees
 - 31 ○ Newtown, New Jersey – 7 employees
 - 32 ○ Union, New Jersey¹ - 179 employees²
- 33 • The Joint Petitioners should maintain sufficient staffing at all Customer Service
34 Centers to adequately address and respond to customers issues and maintain the

¹ The Company maintains one call center at this location. Employee numbers are a mix of executive, operating and customer service personnel.

² Response to RCR-CUS-1.

1 level of service required by the Board beyond the post-test year closing period.
2 (Mugrace)

- 3 • The Joint Petitioners should maintain adequate levels of professional engineering
4 and supervisory staff to properly operate ETG's system while also maintaining
5 ETG's current infrastructure replacement and improvement programs and the
6 anticipated performance outcomes upon which those programs, and their approvals,
7 were based. (Dismukes)

8 **Service Company/Affiliates Relationship Commitments**

- 9 • The Joint Petitioners should be required to submit a detailed operating plan that
10 identifies with specificity the services to be provided to ETG by Southern Company
11 Services ("SCS") and AGL Service Company ("AGSC"). (Peterson)
- 12 • The Board should approve all service agreements between SCS and AGSC.
13 (Peterson)
- 14 • Service company charges to ETG should be capped at the 2015 level for the next
15 five years. (Peterson)
- 16 • Any significant changes in the SCS service agreement with AGLR must be
17 approved by the Board. (Peterson)

18 During the remaining term of the current AMA, SEM should be prohibited from
19 using the ETG gas assets to supply natural gas to an affiliated generating facility.
20 (Rosenkranz)

- 21 • ETG should be prohibited from entering into any future agreements for natural gas
22 asset management services with an affiliate after the existing AMA expires.
23 (Rosenkranz)

24 **Service Quality Commitments**

- 25 • Joint Petitioners must dedicate the resources, the dollars and the methods and
26 processes in order to maintain and further enhance the current level of performance
27 and prevent any backsliding or degradation of customer service. (Mugrace)
- 28 • ETG should be required to achieve and maintain its metric of no more than 1
29 complaint per 1,000 customers annually, or 282 customer complaints,³ as required
30 by the 2009 Base Rate Order. ETG should commit to comply with this Board
31 directive within one year. (Mugrace)
- 32 • The Joint Petitioners should be required to meet and comply with the 2009 Base
33 Rate Order and meet the 95% of calls responded to with respect to Leak/Odor
34 response at all times including nights and weekends. For all calls not responded to
35 within 60 minutes, the ETG should provide reasons for the delay. The Joint
36 Petitioners should commit to meeting this benchmark within one year. (Mugrace)

³ 282,000 current customers /1,000 per customer /contact.

1 **Ring Fencing, Financial Commitments, and Cost Commitments**

- 2 • Southern’s merger financing-related costs (e.g., equity underwriting fees) should
3 not be imposed on or recovered from the Company’s ratepayers. (Kahal)
- 4 • In any future rate filings, where a ratemaking rate of return is at issue, ETG must
5 include the Southern consolidated capital structure (for informational purposes)
6 along with supporting capitalization data. (Kahal)
- 7 • Rate Counsel should retain its rights concerning capital structure recommendations
8 in future ETG rate proceedings, including the potential use of a Southern
9 consolidated capital structure. (Kahal)
- 10 • The Joint Petitioners should commit to retain existing corporate structure, practices,
11 and “ring fencing” and should not be permitted to change these structures or
12 practices without prior Board approval. (Kahal)
- 13 • In the event Southern affiliate actions or risks cause an increase in the AGLR/ETG
14 cost of capital, that increase should not be borne by ETG customers. Specifically,
15 there should be no cost premium related to Southern’s generation supply imposed
16 on ETG customers. (Kahal)
- 17 • The Board should retain its authority to penalize the Joint Petitioners if they violate
18 the Board’s order resulting from this proceeding or any other Board policy, order
19 or rule. This penalty could include, but not be limited to, a reduced allowed rate of
20 return in future rate proceedings. (Dismukes)
- 21 • The Joint Petitioners should not be allowed to recover the merger’s acquisition
22 premium (or “goodwill”) from ETG’s ratepayers. (Kahal)
- 23 • All goodwill-related equity should be excluded from the ratemaking capital
24 structure even if AGL capitalization continues to be used. (Kahal)
- 25 • AGL must strive to maintain a reasonable and prudent capital structure, excluding
26 goodwill. Goodwill should not be used as a basis for AGL to dramatically increase
27 leverage and shift funds to Southern Co. parent. (Kahal)

28 **Synergies**

- 29 • Joint Petitioners should agree to separately track merger synergies and costs to
30 achieve for a period of five years. These estimates must be provided in future rate
31 case proceedings before the Board. (Dismukes)
- 32 • ETG should be prohibited from seeking future cost recovery of any cost to achieve
33 synergy savings unless it demonstrates that those costs have resulted in net synergy
34 savings delivered to ratepayers. (Dismukes)

35 **Competition**

- 36 • Southern should provide an analysis of vertical and horizontal market power issues
37 that may arise as a result of the merger and the Board should retain authority to
38 implement remedial measures, if necessary. (Chang)

- Southern should provide a report to the Board pertaining to pipeline contracts and prices for any future natural gas-fired generation units that it may acquire or develop within the PJM footprint. (Chang)

Q. PLEASE IDENTIFY THE WITNESSES THAT ARE APPEARING ON BEHALF OF RATE COUNSEL AND THEIR RESPECTIVE TOPICS AND RECOMMENDATIONS.

A. Rate Counsel offers the testimony of five additional witnesses in this proceeding:

Mr. Matthew I. Kahal, an independent consulting economist, addresses the financial aspects of the proposed merger, including the merger’s ring-fencing provisions and merger-related cost recovery proposals.

Mr. David E. Peterson, a consultant with Chesapeake Regulatory Consultants, presents testimony on affiliate relationship issues as well as several corporate governance issues associated with the merger.

Mr. Dante Mugrace, a consultant with Economic and Management Consulting Firm of PCMG and Associates, Inc., will discuss a number of employee retention and quality of service issues associated with the proposed merger.

Mr. Maximilian Chang, a consultant with Synapse Energy Economics, is providing testimony on market power and competition issues raised by the proposed merger, and on issues related to the management of ETG’s natural gas capacity and supply assets by an AGLR affiliate.

Mr. John A. Rosenkranz, an independent consultant affiliated with Synapse Energy Economics, is providing testimony on issues related to the management of ETG’s natural gas capacity and supply assets by an AGLR affiliate.

1 **III. OVERVIEW OF PROPOSED MERGER TRANSACTION**

2 **Q. PLEASE PROVIDE AN OVERVIEW OF THE MERGER TRANSACTION.**

3 A. The Joint Petitioners are requesting the Board’s approval for the merger of Southern with
4 AGLR, which includes AGLR’s subsidiary, ETG.⁴ The Purchase Agreement provides that,
5 upon closing, Southern will become the surviving parent company of AGLR and its
6 subsidiaries.⁵ Southern will acquire AGLR through a reverse triangular merger in which
7 AGLR will merge with AMS Corp, at which time AMS Corp will cease to exist, and AGLR
8 will become a wholly-owned subsidiary of Southern.⁶ If approved, Southern will acquire
9 AGLR for approximately \$12 billion.⁷ Following the transaction, Southern will continue
10 to operate ETG as a natural gas distribution utility in New Jersey.⁸

11 **Q. HAVE THE JOINT PETITIONERS PROVIDED ANY RATIONALE FOR THE**
12 **MERGER?**

13 A. Yes. The Joint Petitioners have indicated that Southern is purchasing AGLR and its
14 operating companies primarily for diversification, not efficiency opportunities. The Joint
15 Petitioners believe that the merger will expand Southern’s energy service offerings while
16 creating a company with a more geographically diverse footprint.⁹ Southern has noted
17 publicly that merging with AGLR will better position it to take advantage of the growing
18 use of natural gas for electric generation, which is being driven by changing market
19 dynamics and environmental regulations.¹⁰ Southern’s Chairman, President, and CEO
20 explicitly noted that:

⁴ Verified Joint Petition, p. 1.

⁵ Verified Joint Petition, p. 1.

⁶ Verified Joint Petition, p. 5.

⁷ Verified Joint Petition, p. 6.

⁸ Verified Joint Petition, pp. 5-6.

⁹ Art Beattie, Direct Testimony, 13:13-15.

¹⁰ Art Beattie, Direct Testimony, 13:12-22.

1 As America’s leader in developing the full portfolio of energy
2 resources, we believe the addition of AGL Resources to our business
3 will better position Southern Company to play offense in supporting
4 America’s energy future through additional natural gas
5 infrastructure.

6 ...

7 Moreover, this transaction is expected to position Southern
8 Company to enhance earnings growth while maintaining a strong
9 balance sheet and improving cost-effectiveness.¹¹

10 **Q. WILL AGLR’S MANAGEMENT CHANGE DUE TO THE MERGER?**

11 A. According to the Joint Petitioners, no. The Joint Petitioners state that they have no plans
12 to change the local management of ETG and that “the core management team of AGLR
13 and ETG will remain in place and continue to oversee the company and direct the day-to-
14 day operations of ETG.”¹²

15 **A. Overview of Joint Petitioners’ Operations**

16 **Q. EXPLAIN SOUTHERN’S CURRENT ORGANIZATION AND SERVICE**
17 **TERRITORY.**

18 A. Southern is a holding company that operates four vertically-integrated regulated electric
19 subsidiaries: Alabama Power Company; Georgia Power Company; Gulf Power Company;
20 and Mississippi Power Company.¹³ Southern maintains its corporate headquarters in
21 Atlanta, Georgia with regulated electricity businesses operating in Georgia, Florida,
22 Alabama and Mississippi.¹⁴ Currently, Southern provides service to 4.4 billion customers,
23 with over 27,000 miles of transmission, and 46,000 megawatts (“MWs”) of generating

¹¹ Southern Company to Acquire AGL Resources in \$12 Billion Transaction, Creating Leading U.S. Electric and Gas Utility, Press release, August 24, 2015.

¹² Verified Joint Petition, p. 7.

¹³ Verified Joint Petition, p. 3.

¹⁴ Verified Joint Petition, p. 3.

1 capacity.¹⁵ Southern's regulated retail operations represent roughly 94 percent of the
2 Company's operating revenue with the remaining six percent of its operating revenue
3 coming from its non-regulated businesses.¹⁶

4 **Q. PLEASE DISCUSS SOUTHERN'S UNREGULATED OPERATIONS.**

5 A. Southern's unregulated operations include: Southern Nuclear Operating Company;
6 Southern Power Company; Southern Telecom; and SouthernLINC Wireless.¹⁷ Southern
7 Nuclear Operating Company operates the nuclear generation fleet for the Alabama Power
8 Company and Georgia Power Company.¹⁸ The Southern Power Company is a wholesale
9 energy provider which owns the rights to approximately 10,000 MW of generation capacity
10 in Alabama, California, Florida, Georgia, Nevada, New Mexico, North Carolina,
11 Oklahoma and Texas.¹⁹ Southern Telecom is a telecommunications subsidiary of Southern
12 and provides long-haul and metropolitan dark fiber connecting Atlanta with other smaller
13 cities throughout the Southeast.²⁰ SouthernLINC Wireless is a wireless communications
14 network which provides service, including mobile phones, to businesses and consumers
15 within a 120,000 square mile area which includes Alabama, Georgia, southeastern
16 Mississippi, and the Florida Panhandle.²¹

17 **Q. PLEASE DESCRIBE AGLR.**

18 A. AGLR is a holding company and parent to seven natural gas distribution utility companies:
19 Florida City Gas; Atlanta Gas Light; Nicor Gas; Virginia Natural Gas; Elkton Gas; ETG;

¹⁵ Verified Joint Petition, p. 3.

¹⁶ Verified Joint Petition, p. 3.

¹⁷ Verified Joint Petition, p. 4.

¹⁸ Verified Joint Petition, p. 4.

¹⁹ Verified Joint Petition, p. 4.

²⁰ Verified Joint Petition, p. 4.

²¹ Verified Joint Petition, p. 4.

1 and Chattanooga Gas.²² AGLR maintains its corporate offices in Atlanta, Georgia and
2 operates its seven natural gas distribution subsidiaries in Florida; Georgia; Illinois;
3 Virginia; Maryland; New Jersey; and Tennessee.²³ Through its subsidiaries, AGLR
4 provides natural gas service to approximately 4.5 million customers with over 80,700 miles
5 of pipeline and 14 storage facilities.²⁴ AGLR also operates retail marketing and midstream
6 operations businesses; as well as engages in wholesale energy services through an indirect
7 wholly-owned subsidiary, Sequent Energy Management (“SEM”).²⁵

8 **Q. PLEASE EXPLAIN THE JOINT PETITIONERS’ PROPOSED POST-MERGER**
9 **CORPORATE STRUCTURE.**

10 A. After the merger’s close, AGLR will become a Southern direct subsidiary. AMS Corp was
11 formed as a special purpose entity with the express purpose of consummating the proposed
12 merger and will cease to exist in the post-merger corporate structure.²⁶

13 **B. Overview of Proposed Merger Commitments**

14 **Q. WHAT MERGER-RELATED STIPULATIONS AND CONDITIONS HAVE THE**
15 **JOINT PETITIONERS’ OFFERED IN EXHIBIT C TO THEIR PETITION?**

16 A. The Joint Petitioners have provided thirteen explicit merger-related commitments:

- 17 (1) Modifying ETG’s current AMA with SEM to provide ETG’s customers with an
18 additional \$6 million in credits over the remaining term of the AMA, set to expire
19 March 31, 2019.²⁷
- 20 (2) Filing a base rate case no later than September 1, 2016, as directed by the Board in
21 Docket No. GO12070693.²⁸

²² Verified Joint Petition, p. 4.

²³ Verified Joint Petition, p. 4.

²⁴ Verified Joint Petition, p. 5.

²⁵ Verified Joint Petition, p. 4.

²⁶ Verified Joint Petition, p. 5, ¶ 9.

²⁷ Verified Joint Petition – Exhibit C.

²⁸ Verified Joint Petition – Exhibit C.

- 1 (3) Including any synergies, net of cost to achieve, in future rate cases (to the extent
2 they arise).²⁹
- 3 (4) Not seeking recovery in its rates of (i) any acquisition premium associated with the
4 merger, (ii) any costs associated with goodwill arising from the merger, or (iii) any
5 transaction costs incurred in connection with the merger.³⁰
- 6 (5) Not issuing any debt or equity in connection with the merger.³¹
- 7 (6) Limiting affiliate charges for a period of two years after the merger to amounts no
8 greater than they would have been had the merger not occurred, regardless of
9 whether such services are provided directly or indirectly by SCS, AGL Services
10 Company, or any other Southern Company affiliate.³²
- 11 (7) Maintaining a minimum of 300 employees in New Jersey supporting ETG's
12 operations for at least three years.³³
- 13 (8) Honoring all existing collective bargaining agreements in effect at the time of the
14 closing of the merger.³⁴
- 15 (9) Maintaining ETG's headquarters in Union, New Jersey and maintaining ETG's
16 existing call center for a least three years following the merger.³⁵
- 17 (10) Maintaining a separate board of directors for AGLR for at least five years following
18 the close of the merger.³⁶
- 19 (11) Continuing to maintain ETG in corporate name and form, and continuing to provide
20 separately audited financial statements to the Board for itself and Pivotal Utility
21 Holdings.³⁷
- 22 (12) Increasing ETG's current community support contributions from \$190,000 per year
23 to \$500,000 per year for a period of five years following the close of the proposed
24 merger.³⁸
- 25 (13) Complying with all applicable New Jersey and federal requirements related to
26 affiliate transactions.³⁹

27 **Q. HAVE THE JOINT PETITIONERS' MADE ANY OTHER MERGER-RELATED**
28 **COMMITMENTS IN THEIR PETITION AND DIRECT TESTIMONY?**

²⁹ Verified Joint Petition – Exhibit C.

³⁰ Verified Joint Petition – Exhibit C.

³¹ Verified Joint Petition – Exhibit C.

³² Verified Joint Petition – Exhibit C.

³³ Verified Joint Petition – Exhibit C.

³⁴ Verified Joint Petition – Exhibit C.

³⁵ Verified Joint Petition – Exhibit C.

³⁶ Verified Joint Petition – Exhibit C.

³⁷ Verified Joint Petition – Exhibit C.

³⁸ Verified Joint Petition – Exhibit C.

³⁹ Verified Joint Petition – Exhibit C.

1 A. Yes. The Joint Petitioners offered additional commitments in their petition and direct
2 testimony including:

- 3 • Maintaining Elizabethtown’s core management team and structure.⁴⁰
- 4 • Preparing a pre-merger revenue/cost study for ETG to submit after its first rate
5 case.⁴¹
- 6 • Maintaining existing tariffs and procedures regarding natural gas transportation and
7 third party suppliers.⁴²
- 8 • Maintaining ETG’s current quantity and reliability of service.⁴³
- 9 • Continuing to make infrastructure improvements and will proceed with the
10 application before the Board concerning its proposed Safety Modernization and
11 Reliability (“SMART”) Program.⁴⁴

12 **IV. BOARD MERGER GUIDELINES AND STANDARDS**

13 **Q. PLEASE EXPLAIN THE BOARD’S MERGER APPROVAL STANDARDS.**

14 A. The Board’s standard of review is defined by both statute and administrative code. The
15 statute governing the Board’s merger guidelines is provided in N.J.S.A. 48:2-51.1, and
16 defines four areas for the Board to assess in considering a proposed merger. These include
17 the effect of the proposed acquisition on (1) competition, (2) the rates of ratepayers, (3) the
18 employees of the acquired utility, and (4) the provision of safe and adequate utility service
19 at just and reasonable rates.

20 In considering a request for approval of an acquisition of control,
21 the board shall evaluate the impact of the acquisition on
22 competition, on the rates of ratepayers affected by the acquisition of
23 control, on the employees of the affected public utility or utilities,
24 and on the provision of safe and adequate utility service at just and
25 reasonable rates.⁴⁵

⁴⁰ Hank Linginfelter, Direct Testimony, 15:17-18.
⁴¹ Verified Joint Petition, p 11.
⁴² Hank Linginfelter, Direct Testimony, 18:1-3.
⁴³ Hank Linginfelter, Direct Testimony, 16:13-21.
⁴⁴ Hank Linginfelter, Direct Testimony, 11:13-24 and 12:1-3.
⁴⁵ N.J.S.A. 48:2-51.1(a).

1 The BPU's regulations provide additional clarity on the statutory standard as it is applied
2 by the Board. N.J.A.C 14:1-5.14(c) defines this standard as follows:

3 The Board shall not approve a merger, consolidation, acquisition
4 and/or change in control unless it is satisfied that positive benefits
5 will flow to customers and the State of New Jersey and, at a
6 minimum, that there are no adverse impacts on any of the criteria
7 delineated in N.J.S.A. 48:2-51.1.⁴⁶

8 This standard requires a showing of positive incremental ratepayer benefits for
9 merger approval, often referred to as a "net benefits standard." Importantly, this
10 requirement is in addition to the required demonstration that that a proposed merger
11 produce no adverse impacts in any of the four areas mentioned in N.J.S.A. 48:2-51.1.

12 **Q. IS THERE ANY BOARD PRECEDENT FOR UTILIZING THE NET BENEFITS**
13 **STANDARD OF REVIEW FOR EVALUATING PROPOSED UTILITY**
14 **MERGERS?**

15 A. Yes. As far back as October 2001, the Board approved a Stipulation of Settlement that
16 included net positive benefit provisions in the merger of FirstEnergy Corp. and Jersey
17 Central Power and Light Company. The Board noted that:

18 Because the issue of the appropriate treatment of these [merger-
19 related] "benefits" is before the Board, it will examine whether the
20 calculation of these benefits is properly derived by the petitioners
21 and whether, under the Stipulation before the Board, the benefits are
22 equitably shared with ratepayers.⁴⁷

23 **Q. DID THE BOARD UTILIZE THE SAME STANDARD OF REVIEW IN**
24 **EVALUATING ETG'S 2004 MERGER WITH AGLR?**

⁴⁶ N.J.A.C 14:1-5.14(c).

⁴⁷ In the Matter of the Joint Petition of FirstEnergy Corp. and Jersey Central Power & Light Company, D/B/A GPU Energy, for Approval of a Change in Ownership and Acquisition of Control of a New Jersey Public Utility and Other Relief. Docket No. EM00110870, Order of Approval, dated October 9, 2001, pp. 6-7.

1 A. Yes. In ETG’s 2004 merger with AGLR, the Board stated that it had typically relied on a
2 "no harm" standard, as opposed to a positive net benefit standard, when reviewing most
3 prior merger cases. However, the Board found the circumstances surrounding ETG’s 2004
4 merger to be sufficiently distinct from prior merger cases brought before it to warrant the
5 Board expanding its scope of review. Specifically, ETG entered the 2004 merger in a
6 relatively distressed position financially and operationally due to mismanagement and
7 other poor practices on the part of ETG. Thus, the Board believed that the public
8 reasonably expected improvements and positive benefits from the proposed merger.⁴⁸

9 **Q. HAS THE BOARD RE-ITERATED ITS POSITIVE NET BENEFIT STANDARD**
10 **OF REVIEW IN ANY RECENT UTILITY MERGER APPROVALS?**

11 A. Yes, most recently the Board relied upon this standard of review in its March 19, 2015
12 Order approving the merger of Pepco Holdings, Inc. (“PHI”), the parent company of
13 Atlantic City Electric Company (“ACE”), with Exelon,⁴⁹ finding:

14 ...the statutory criteria set forth in N.J.S.A. 48:3-10,
15 N.J.S.A. 48:2-51.1 and N.J.A.C. 14:1-5.14(c) are satisfied
16 and that the proposed change in control can be accomplished
17 without adverse impact on competition, rates, employees, or
18 the provision of safe and adequate utility service at just and
19 reasonable rates and that on balance positive benefits will
20 accrue to the customers of ACE and the State of New
21 Jersey.⁵⁰

22 **Q. HAVE THE JOINT PETITIONERS ACKNOWLEDGED THE BOARD’S**
23 **MERGER REVIEW CRITERIA?**

⁴⁸ In the Matter of the Petition of NUI Utilities, Inc. d/b/a Elizabethtown Gas Company and AGL Resources Inc. for Authority Under N.J.S.A. 48:2-51.1 and N.J.S.A. 48:3-10 of a Change in Ownership and Control, Docket No. GM04070721, Order of Approval, November 17, 2004, p. 6.

⁴⁹ In the Matter of the Merger of Exelon Corporation and Pepco Holdings, Inc., Docket No. EM14060581, Order Approving Stipulation of Settlement, March 19, 2015.

⁵⁰ In the Matter of the Merger of Exelon Corporation and Pepco Holdings, Inc., Docket No. EM14060581, Order Approving Stipulation of Settlement, March 19, 2015, p. 43. Emphasis Added.

1 A. Yes. The Joint Petitioners have acknowledged the Board’s reliance on N.J.S.A. 48:2-51.1
2 and N.J.A.C. 14:1-5.14(c) stating “the Board shall not approve a change in control ‘unless
3 it is satisfied that positive benefits will flow to customers and the State of New Jersey and,
4 at a minimum, that there are no adverse impacts’ on competition, rates, the employees of
5 the affected public utility, and on the provision of safe and adequate utility service at just
6 and reasonable rates.”⁵¹

7 **Q. ARE THE JOINT PETITIONERS’ MERGER COMMITMENTS CONSISTENT**
8 **WITH THE BOARD’S NET POSITIVE BENEFITS STANDARD OF REVIEW?**

9 A. No. The commitments made by the Joint Petitioners are not consistent with the Board’s
10 standards since they do not offer New Jersey ratepayers any net positive merger-related
11 benefits. Indeed, the only known and measurable benefit associated with the proposed
12 merger consists of a \$6 million dollar ratepayer credit that will be passed along to
13 ratepayers through the natural gas management contract between AGLR, SEM and ETG.
14 Beyond this offer, the Joint Petitioners’ other merger commitments consist of (1) a large
15 number of affirmations that should be standard practice for any regulated utility (like
16 providing “safe, reliable, and economic service”), or (2) commitments representing nothing
17 more than assertions about future operating practices that are not tied to any benchmarks
18 or metrics, nor any performance penalties if these commitments are not met. Such
19 assertions do not provide New Jersey ratepayers with adequate protections against the
20 potential adverse impacts that might result from the proposed merger, and simply shift
21 performance risk associated with merger away from Joint Petitioners (and their
22 shareholders), and onto New Jersey ratepayers. In addition to being too small in the

⁵¹ Art Beattie, Direct Testimony, 16:16-19 and 17:1-2.

1 absolute, the \$6 million dollar ratepayer credit offered by the Joint Petitioners as a new
2 positive benefit from the merger is simply insufficient to offset many of the future
3 operational unknowns associated with the proposed merger. I will discuss these
4 deficiencies in greater detail in the following sections of my testimony.

5 **IV. PROPOSED RATEPAYER BENEFITS**

6 **A. Overview of Joint Petitioners Merger-Related Commitments**

7 **Q. PLEASE EXPLAIN THE STANDARD THAT SHOULD BE APPLIED IN**
8 **CONDUCTING AN EVALUATION OF PROPOSED MERGERS.**

9 A. While I am not an attorney, I am regularly called upon in my capacity as a regulatory
10 consultant to explain public policies defined by legal precedent in order to apply them to
11 the facts of a particular regulatory proceeding. In general, I understand that, in order for a
12 merger to be approved, the merger must be in the public interest. In New Jersey, the Board
13 has previously defined this as requiring petitioners to demonstrate that positive benefits
14 will flow to customers and to the State of New Jersey,⁵² in addition to demonstrating that
15 the proposed merger will impart no adverse impacts on the utility's ability to provide safe
16 and adequate utility service at just and reasonable rates.⁵³ In all, it is my understanding
17 that the Joint Petitioners must not only demonstrate that the proposed merger will not
18 adversely impact ETG's operations and ratepayers (i.e. must meet a "no harm standard"
19 for each of the four areas mentioned in the statute), but must additionally demonstrate that
20 the proposed merger provides meaningful benefits to ratepayers over the existing
21 operational structure of the utility (to meet what can be called a "net benefits standard").

⁵² N.J.A.C. 14:1-5.14(c).

⁵³ N.J.A.C. 14:1-5.14(c), and N.J.S.A. 48:2-51.1.

1 **Q. PLEASE EXPLAIN HOW YOU EVALUATED THE PROPOSED MERGER**
2 **GIVEN THIS POLICY FRAMEWORK.**

3 A. My analysis consisted of three principal, inter-related components. First, I attempted to
4 validate the Joint Petitioners' quantification of the level of the merger's purported costs
5 and benefits to ratepayers. Second, I focused on the important distinction between
6 purported benefits to ratepayers that would occur absent the merger and any incremental
7 benefits to ratepayers that result directly from the merger. Third, I focused on the equally
8 important distinction between benefits to ratepayers and positive aspects of the merger that
9 do not constitute direct and quantifiable ratepayer benefits (e.g., charitable contributions,
10 commitments to honor union agreements, and protecting against adverse events).

11 **Q. IS IT INCUMBENT UPON THE JOINT PETITIONERS TO CLEARLY SHOW**
12 **THAT THE MERGER IS IN THE PUBLIC INTEREST?**

13 A. Yes. It is my understanding that it is incumbent upon the Joint Petitioners – not
14 stakeholders – to show that the proposed merger is in the public interest. This
15 responsibility, which cannot be overstated, includes having the applicants clearly identify
16 and enumerate both the proposed merger costs and proposed merger benefits and to provide
17 clear evidence that the proposed merger has a meaningful likelihood of leading to benefits
18 that exceed costs (i.e., will result in net benefits to ratepayers).

19 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR ANALYSIS OF THE**
20 **PROPOSED MERGER'S RATEPAYER BENEFITS.**

21 A. My testimony, in conjunction with that of Rate Counsel's other expert witnesses,
22 demonstrate that the Joint Petitioners have been deficient in showing that the proposed
23 merger will result in clear net benefits to New Jersey ratepayers. Indeed, the Joint

1 Petitioners offer very little in terms of new incremental ratepayer benefits in their proposal.
2 Under some scenarios, the proposed merger could result in a net cost to New Jersey
3 ratepayers, even before considering the wide range of uncertainties and performance-
4 related risks that will be shifted to ratepayers if the merger is approved in its current form.
5 Any direct, traceable, and quantifiable benefit resulting from the proposed merger are
6 outweighed by the additional risks to which the merger exposes ratepayers.

7 **B. The Proposed Merger Does Not Meet the Incremental Benefits Components of the**
8 **Board's Merger Test**

9 **1. BPU Merger Condition 1: Overall Net Benefits**

10 **Q. ARE THE JOINT PETITIONERS' PROPOSED RATEPAYER BENEFITS**
11 **SUFFICIENT TO JUSTIFY THE PROPOSED MERGER?**

12 A. No. The proposed merger's direct, quantifiable, traceable, and tangible benefits to
13 ratepayers are very limited and entirely restricted to the Joint Petitioners' proposal to
14 provide a \$6 million ratepayer credit from the modification of ETG's current AMA with
15 SEM. Unlike other mergers proposed to the Board in the past, or other recent mergers in
16 other jurisdictions, the Joint Petitioners have made no commitment to achieve or share any
17 synergy savings with ETG's ratepayers. The proposed increase in charitable contributions,
18 while commendable, does not provide any direct ratepayer benefits and does not establish
19 any net benefits under the Board's standard. Further, as discussed in more detail below,
20 the remaining merger commitments either maintain the status quo, affirm regulatory
21 commitments, or mitigate—but do not eliminate--the potential costs and risks of the merger
22 for ratepayers and employees.

23 **Q. PLEASE COMMENT ON THE ADEQUACY OF THE JOINT PETITIONERS'**
24 **PROPOSED \$6 MILLION RATEPAYER CREDIT.**

1 A. The Joint Petitioners are offering a single \$6 million ratepayer credit, which will be passed
2 along to ratepayers through a credit in their Basic Gas Supply Service (“BGSS”) charges.
3 This proposed ratepayer credit is fraught with a number of shortcomings relative to the
4 Board’s merger standards of review that I will discuss in greater detail later in my
5 testimony. However, in summary, some of these shortcomings include: the merger-related
6 credit is not tied to any efficiency savings associated with natural gas procurement or
7 distribution system operations; many of the specific terms regarding the distribution of the
8 credit are not defined and the amount offered is relatively small, particularly considering
9 the acquisition premium being paid by Southern’s shareholders for AGLR, and not all
10 ratepayers will receive the credit.

11 **Q. WHY DO THE JOINT PETITIONERS’ PROPOSAL TO INCREASE ETG’S**
12 **CHARITABLE CONTRIBUTIONS NOT REPRESENT A NET INCREMENTAL**
13 **RATEPAYER BENEFIT?**

14 A. Historically, ETG and AGLR have contributed approximately \$2.9 million to New Jersey
15 community service organizations,⁵⁴ which averages to approximately \$190,000 in
16 community charitable support per year.⁵⁵ The Joint Petitioners proposed to increase ETG’s
17 current community support to \$500,000 annually for a period of five years following the
18 closing of the merger.⁵⁶ These proposed contributions, however, do not represent a direct
19 ratepayer benefit, per se, and instead represent contributions that should be made to reflect
20 good corporate stewardship and community participation. Charitable contributions should
21 not count in evaluating whether the proposed merger results in direct, traceable,

⁵⁴ Direct Testimony of Hank P. Linginfelter, 7:6-10.

⁵⁵ Direct Testimony of Hank P. Linginfelter, 14:3-6.

⁵⁶ Direct Testimony of Hank P. Linginfelter, 14:3-6.

1 quantifiable, and tangible benefits to ratepayers. Indeed, the Joint Petitioners have not
2 specifically identified any link between the proposed increases in annual charitable
3 contributions and the proposed merger: no evidence has been provided that shows that
4 AGLR or ETG could not increase those contributions absent the merger.

5 **Q. ARE THERE OTHER CONCERNS ASSOCIATED WITH THE PROPOSED**
6 **INCREASE IN CHARITABLE CONTRIBUTIONS, CORPORATE CITIZENSHIP**
7 **AND LOCAL COMMUNITY INVOLVEMENT?**

8 A. Yes. First, concerning contributions, the Joint Petitioners do not identify how these
9 contributions will be specifically allocated, instead noting that the contributions could
10 include financial contributions to charitable organizations, workforce development, and
11 economic development efforts, similar to ETG's current charitable support activities.⁵⁷
12 Second, the Joint Petitioners have not clarified whether these increases will come internally
13 from ETG, or represent some transfer from Southern to ETG to cover such costs.⁵⁸ Third,
14 the Joint Petitioners have not made any local community commitments or corporate
15 citizenship commitments outside of the financial contributions discussed earlier.⁵⁹
16 Southern does not appear to have done any assessment of ETG's current corporate
17 citizenship activities, nor offered any insights into how those could be expanded or
18 improved.⁶⁰

19 **Q. DO YOU HAVE ANY FURTHER COMMENTS CONCERNING THE JOINT**
20 **PETITIONERS' CHARITABLE CONTRIBUTIONS AND LOCAL COMMUNITY**
21 **SUPPORT?**

⁵⁷ Direct Testimony of Hank P. Linginfelter, 14:6-8.

⁵⁸ Joint Petitioners response to RCR-CUS-11.

⁵⁹ Joint Petitioners response to RCR-CUS-11.

⁶⁰ Joint Petitioners response to RCR-CUS-11.

1 A. Yes. The Joint Petitioners’ proposal to substantially increase ETG’s charitable
2 contributions by some 163 percent on an annual average basis for five years is admirable
3 and meaningful. However, this increase in charitable contributions does not appear to be
4 tied to the merger, nor any direct financial transfer from Southern to ETG that would not
5 have occurred but for the merger. As such, there is nothing to suggest that ETG could not
6 increase these contributions on their own. Further, while the charitable contributions are
7 meaningful, Southern’s commitment to local New Jersey communities appears to stop
8 there. No other community involvement commitments have been made by the Joint
9 Petitioners, particularly by Southern’s upper management. The Board should expect to see
10 strong support for local and community involvement, directed by Southern’s upper
11 management, which is guided by well-defined priorities. To date, Southern has defined no
12 such priorities.⁶¹ Thus, the Joint Petitioners’ charitable contribution “commitment” cannot
13 be sufficient to pass the Board’s net public benefits standard. Furthermore, the Board
14 should note the limited nature of the Joint Petitioners’ commitment: the increased
15 contributions will only last for a period of two years.

16 **Q. WILL THE JOINT PETITIONERS’ COMMITMENTS RELATIVE TO**
17 **PRESERVING AGLR’S BOARD OF DIRECTORS RESULT IN AN**
18 **INCREMENTAL RATEPAYER BENEFIT?**

19 A. No. The Joint Petitioners propose to retain a separate board of directors consisting of
20 outside directors for AGLR for a minimum of five years following the close of the proposed
21 merger.⁶² The Joint Petitioners state that this is consistent with Southern’s management

⁶¹ See, Direct Testimony of Art P. Beattie, 19:9-10.

⁶² Direct Testimony of Hank P. Linginfelter, 8:19-21.

1 philosophy and practice to have a separate board for each of its operating subsidiaries
2 comprised of independent, non-employee directors.⁶³

3 **Q. EXPLAIN HOW THIS CORPORATE GOVERNANCE COMMITMENT DOES**
4 **NOT LEAD TO INCREMENTAL BENEFITS TO RATEPAYERS.**

5 A. While the proposed commitment to maintain a separate board of directors for AGLR for a
6 minimum of five years will reduce the risk that new Southern management will enact
7 policies contrary to the financial best interests of AGLR and ETG in favor of other
8 subsidiaries of Southern, the commitment provides no incremental benefit to ratepayers.
9 The technical aspects of this issue will be discussed in greater detail by Mr. David Peterson,
10 another expert witness appearing on the behalf of Rate Counsel. However, from a policy
11 perspective, the Joint Petitioners' corporate governance commitments simply maintain the
12 status quo, or limit a potential negative consequence of the proposed merger. The proposed
13 governance commitment does not provide incremental benefits to New Jersey ratepayers,
14 nor do the Joint Petitioners appear to have this framework in mind in developing the
15 proposed commitment, contrary to New Jersey governing law and Board precedent.⁶⁴

16 **2. BPU Merger Condition 2: Safeguards against Adverse Impact on Competition**

17 **Q. PLEASE EXPLAIN HOW THE JOINT PETITIONERS' COMPETITION-**
18 **RELATED MERGER COMMITMENTS FAIL TO MEET THE BOARD'S**
19 **STANDARD OF REVIEW REGARDING COMPETITION.**

20 A. According to Mr. Maximilian Chang, another expert witness appearing on the behalf of
21 Rate Counsel, the merger as currently proposed does not provide positive benefits for New
22 Jersey ratepayers in terms of market power and competition. The Joint Petitioners have

⁶³ Direct Testimony of Art P. Beattie, 12:20 to 13:10.

⁶⁴ Verified Joint Petition, p. 11, ¶26.

1 failed to provide any horizontal or vertical market power analysis in order to ensure that
2 there will be no adverse impacts on competition. The merger as proposed does not
3 preclude the Southern Company from owning or acquiring natural gas-fired generation
4 units in the PJM territory in the future. If protections are not put into place the merger, if
5 approved, could potentially result in scenarios where ETG's gas capacity and supply assets
6 are not managed to maximize the value of those assets for ETG's ratepayers, but instead to
7 benefit Southern.

8 **3. BPU Merger Condition 3: Protection against Rate Increases**

9 **Q. HAVE THE JOINT PETITIONERS MADE ANY MERGER-RELATED**
10 **COMMITMENTS THAT PROVIDES ADEQUATE PROTECTIONS AGAINST**
11 **FUTURE RATE INCREASES?**

12 A. No. As noted earlier, the Joint Petitioners have not made such commitments, and have no
13 firm timetable on when they will explore and identify any potential synergy savings that
14 could reduce current ETG rates. This failure, coupled with the Joint Petitioners' failure to
15 identify any adequate protections against future cost transfers from affiliate service
16 companies, or other affiliates, results in an absence of new incremental benefits for ETG's
17 ratepayers and lack of adequate protection against future rate increases.

18 **Q. ARE THE JOINT PETITIONERS OFFERING ANY PROTECTIONS WITH**
19 **THESE SERVICE COMPANY CHANGES?**

20 A. No. The Joint Petitioners merely state:

21 that for a period of two years following the closing of the Merger, the
22 amount of costs assessed to Elizabethtown for services provided by an
23 affiliate shall be no greater than it would have been had the Merger not
24 occurred, regardless of whether such services are provided directly or
25 indirectly by SCS, AGSC or any other Southern Company affiliate.⁶⁵

⁶⁵ Direct Testimony of Mark S. Lantrip, 5:4-9.

1 This is a statement without any value as it would be very difficult to determine the amount
2 of charges that would have occurred absent the merger. These issues will be discussed in
3 greater detail in Mr. David Peterson’s testimony.

4 **Q. PLEASE EXPLAIN THE FINANCIAL RING-FENCING COMMITMENTS**
5 **OFFERED BY THE JOINT PETITIONERS.**

6 A. The Joint Petitioners make a series of commitments related to how they plan to finance the
7 proposed merger, mitigate any merger-related impacts on ETG’s cost of capital and pass
8 along any cost savings to ratepayers in future proceedings. However, for several reasons,
9 none of these commitments represent quantifiable incremental benefits to ratepayers, and
10 merely address the issue of risk associated with the transaction. First, the Joint Petitioners
11 commit to not issue any new debt or equity instruments at the AGLR or ETG level as a
12 result of the merger, and not to impose any merger-related financial commitments upon
13 AGLR or ETG.⁶⁶ Second, the Joint Petitioners have committed to a number of conditions
14 to avoid imposing the financial costs of the merger, or the costs of Southern’s operations,
15 onto AGLR or ETG.⁶⁷ The Joint Petitioners have committed to excluding all merger-
16 related costs from being included in rates including: (1) any transaction costs in connection
17 with the merger; (2) any goodwill related to the merger; and (3) any acquisition premium
18 associated with the merger.⁶⁸ Further, the Joint Petitioners propose to maintain AGLR as
19 a holding company for ETG and AGL’s other utility affiliates.⁶⁹ These provisions are
20 typically referred to a “ring-fencing” since they are designed to form a financial barrier, or

⁶⁶ Verified Joint Petition – Exhibit C, p. 1, ¶5; and Verified Joint Petition – Exhibit B, p. 12, §3.3(b).

⁶⁷ Verified Joint Petition, Exhibit C, ¶4 and ¶11.

⁶⁸ Direct Testimony of Art P. Beattie, 3:22-25.

⁶⁹ Verified Joint Petition p. 8, ¶19. See also, Verified Joint Petition, Exhibit C, p. 2 ¶11.

1 “ring,” that should protect regulated utility affiliates and ratepayers against certain adverse
2 outcomes associated with the parent or other affiliates.

3 **Q. ARE THE JOINT PETITIONERS’ RING FENCING MEASURES ADEQUATE?**

4 A. The proposed ring-fencing measures are appropriate but they do not completely protect
5 AGLR and ETG from merger-related risks. The technical issues raised by the Joint
6 Petitioners’ proposed ring fencing measures and the additional measures that are required
7 to protect ratepayers, are addressed in the testimony of Mr. Matthew I. Kahal, another
8 expert appearing on the behalf of Rate Counsel. However, from a policy perspective, these
9 financial and ring fencing commitments, while reasonable, only serve to mitigate risks
10 created by the merger. They do not create a positive incremental benefit. As such, they do
11 not pass the Board’s positive public benefits standard of review.

12 **Q. PLEASE EXPLAIN WHAT IS MEANT BY MERGER-RELATED COSTS.**

13 A. The Joint Petitioners define merger-related costs as those associated with: (1) any
14 acquisition premium associated with the merger; (2) any costs associated with goodwill
15 arising from the merger; and (3) any transaction costs incurred in connection with the
16 merger.⁷⁰ Acquisition premiums, sometimes referred to as “goodwill,” are the amount an
17 acquiring firm pays in excess of the book value of the asset(s) purchased. In other words,
18 the acquisition premium reflects the “mark-up” one party to the acquisition transaction is
19 willing to pay the other. Likewise, transaction costs are costs incurred by Southern and
20 AGLR in their closing of the proposed merger. For the purposes of their commitment, the
21 Joint Petitioners have defined transaction costs as: (1) fees paid to consultants, investment

⁷⁰ Verified Joint Petition – Exhibit C, p. 1, ¶4.

1 bankers, and lawyers, (2) change-in-control payments, and (3) costs associated with the
2 shareholder meetings and associated proxy statement for AGLR's shareholder approval.⁷¹

3 **Q. PLEASE EXPLAIN THE JOINT PETITIONERS' MERGER-RELATED COST**
4 **COMMITMENTS.**

5 A. The Joint Petitioners have committed to exclude all merger-related costs from being
6 included in rates including (1) any transaction costs in connection with the merger; (2) any
7 goodwill related to the merger; (3) any acquisition premium associated with the merger.⁷²

8 The Joint Petitioners' commitments on this issue are also being addressed by Rate
9 Counsel's witness Mr. Matthew Kahal.

10 **Q. LASTLY, IS THE JOINT PETITIONERS COMMITMENT TO FILE A RATE**
11 **CASE NO LATER THAN SEPTEMBER 1, 2016 A BENEFIT OF THE MERGER?**

12 A. No. This is not a merger commitment but rather a requirement as the Board ordered ETG
13 to file a rate case no later than September 1, 2016 in Docket No. GO12070693.⁷³ The Joint
14 Petitioners' commitment to file a rate case is simply an assurance that it intends to comply
15 with the Board's order.

16 **4. BPU Merger Condition 4: Protection against Adverse Employee Impacts**

17 **Q. DO THE JOINT PETITIONERS COMMIT TO MAINTAINING CURRENT ETG**
18 **EMPLOYEES AFTER THE CLOSING OF THE PROPOSED MERGER?**

19 A. In general, yes, but for only a limited time. First, the Joint Petitioners commit to
20 maintaining 300 employees in New Jersey supporting ETG's operations for a three year

⁷¹ Verified Joint Petition – Exhibit C, p. 1, ¶4; and Direct Testimony of Art P. Beattie, 24:14-18.

⁷² Direct Testimony of Art P. Beattie, 3:22-25.

⁷³ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of an Accelerated Infrastructure Replacement Program and Associated Cost Recovery Mechanism, Docket No. GO12070693, Order, August 21, 2013, p. 3.

1 period. This commitment encompasses Southern, AGLR, ETG, and both Southern and
2 AGLR’s service company together.⁷⁴ Second, the Joint Petitioners commit to honor all of
3 AGLR and ETG’s collective bargaining agreements that are currently in place at the time
4 of the closing of the merger.⁷⁵ Third, the Joint Petitioners commit to retain the core
5 management team of AGLR and maintain a “strong local management team,” for ETG,⁷⁶
6 formally maintaining ETG as a separate operating company using the same corporate name
7 for business purposes in New Jersey, and maintaining the same headquarters in New
8 Jersey.⁷⁷ Finally, the Joint Petitioners commit that ETG ratepayers will not be adversely
9 affected by the change in the provision of services between its service entities, as some
10 administrative assistance provided for ETG through AGSC will be provided by SCS in the
11 future.⁷⁸

12 **Q. DO THE JOINT PETITIONERS’ PROPOSED EMPLOYMENT COMMITMENTS**
13 **PROVIDE ADEQUATE PROTECTION AGAINST ADVERSE EMPLOYEE**
14 **IMPACTS ASSOCIATED WITH THE MERGER?**

15 A. No. Mr. Dante Mugrace, another expert appearing on the behalf of Rate Counsel, will
16 discuss some of the technical details associated with this commitment in his testimony.
17 However, from a policy perspective, these commitments are not sufficient to protect
18 against adverse employee impacts. The Joint Petitioners’ commitments simply maintain
19 the current level of employment for a three-year period. This commitment is nothing more
20 than an assurance to limit the short-term negative employment impact of the merger. It

⁷⁴ Verified Joint Petition – Exhibit C, p. 2 ¶7.

⁷⁵ Verified Joint Petition, Exhibit C, p. 2 ¶8.

⁷⁶ Direct Testimony of Hank P. Linginfelter, 8:17-18.

⁷⁷ Direct Testimony of Hank P. Linginfelter, 8:10-11.

⁷⁸ Direct Testimony of Mark S. Lantrip, 7:14-17.

1 could very well be the case that these employee positions will be eliminated in 36 months
2 after Southern has started, and completed, a more comprehensive assessment of ETG and
3 AGLR's operations and opportunities for synergies and efficiencies. The Joint Petitioners'
4 collective bargaining commitments suffer from the same limitations as their other
5 employment commitments. Although the prior collective bargaining agreements between
6 ETG and its unions expired on November 20, 2015, with a new agreement being ratified
7 on December 11, 2015,⁷⁹ there is nothing suggesting these agreements will not be adversely
8 renegotiated in the future. While the Joint Petitioners' employment commitment is
9 appropriate, it is simply one that maintains the status quo and does not protect against future
10 adverse outcomes.

11 **Q. SHOULD THE JOINT PETITIONERS COMMITMENT NOT TO CHANGE**
12 **ETG'S MANAGEMENT OR THE LOCATION OF ITS HEADQUARTERS BE**
13 **CONSIDERED A PROTECTION AGAINST ADVERSE IMPACTS ON**
14 **EMPLOYEES?**

15 A. No. Although the Joint Petitioners suggest that this commitment ensures that customers
16 are not negatively impacted by the execution of the merger,⁸⁰ these commitments are
17 somewhat open ended with no definitive time period. It could very well be the case that
18 the management structure, organization, and location of ETG's headquarters could be
19 changed after Southern has started and completed a more comprehensive assessment of
20 ETG and AGLR's operations and opportunities for synergies and efficiencies.

21 **Q. DO THE JOINT PETITIONERS PROPOSE TO MODIFY ETG'S CURRENT**
22 **CALL CENTER OPERATIONS AS PART OF THE PROPOSED MERGER?**

⁷⁹ Joint Petitioners' response to RCR-CUS-20.

⁸⁰ Direct Testimony of Hank P. Linginfelter, 8:5-7.

1 A. No. The Joint Petitioners commit to maintaining ETG’s existing call center in New Jersey
2 for at least three years following the close of the merger.⁸¹ Currently, ETG maintains a
3 single call center located at 520 Green Lane in the city of Union that employs 37 workers.⁸²
4 The Joint Petitioners have indicated that, prior to the merger, AGLR had no plans to close
5 this call center.⁸³

6 **Q. DOES THIS COMMITMENT PROVIDE ADEQUATE PROTECTION AGAINST**
7 **ADVERSE IMPACTS ON EMPLOYEES?**

8 A. No. This is another issue that will be addressed in greater detail by Mr. Mugrace. However,
9 from a policy perspective, the Joint Petitioners’ various management, headquarters, and
10 call center commitments do not protect employees against potential adverse impacts
11 associated with the proposed merger. It could very well be the case that the call center will
12 be eliminated in 36 months after Southern has started, and completed, a more
13 comprehensive assessment of ETG and AGL’s operations and opportunities for synergies
14 and efficiencies.

15 **5. BPU Merger Condition 5: Assurance against Adverse Impacts on Provision of Safe**
16 **and Adequate Utility Service at Reasonable Rates**

17 **Q. HAVE THE JOINT PETITIONERS PROVIDED SUFFICIENT EVIDENCE THAT**
18 **THAT SAFE AND ADEQUATE UTILITY SERVICE WILL BE PROVIDED AT**
19 **REASONABLE RATES?**

20 A. No. The Joint Petitioners provide only a limited discussion of ETG’s quality of service
21 levels, or the potential impact the proposed merger will have on such levels. The Joint

⁸¹ Direct Testimony of Hank P. Linginfelter, 8:11-13.

⁸² Joint Petitioners response to RCR-CUS-1.

⁸³ Direct Testimony of Hank P. Linginfelter, 8:13-16.

1 Petitioners provide assurances that the proposed merger will “not adversely impact
2 customers in terms of customer service and the safety and reliability of the ETG natural
3 gas transmission and distribution system.”⁸⁴ The Joint Petitioners also assure the Board
4 that ETG’s new ultimate owner (Southern) is, “committed to ensuring ETG continues to
5 provide outstanding customer service and reliability.”⁸⁵ The technical aspects of this issue
6 is being addressed in greater detail by Mr. Dante Mugrace. However, from a policy
7 perspective, the Joint Petitioners’ commitment contains no specifics on how the Joint
8 Petitioners propose to measure ETG’s quality of service levels, nor do the Joint Petitioners
9 propose any shareholder consequences for failing to maintain ETG’s current quality of
10 service levels ratepayers have come to expect from their utility company.

11 **Q. DO THE JOINT PETITIONERS PROVIDE ANY COMMITMENT REGARDING**
12 **ETG’S EXISTING INFRASTRUCTURE REPLACEMENT PROGRAMS?**

13 A. Yes. The Joint Petitioners state that they are “committed to providing ETG the resources
14 necessary to invest in capital and infrastructure projects so that it may continue to provide
15 safe, adequate and proper utility service as just and reasonable rates.”⁸⁶ Likewise, the Joint
16 Petitioners state that “diverse financial enterprise” of Southern will assist its plans to
17 continue the significant infrastructure improvements necessary for ETG to continue to
18 adequately service its customers.⁸⁷ This commitment, like so many others, does not
19 represent a net positive benefit, but simply supports an aspiration to maintain the status
20 quo. The Joint Petitioners do not guarantee any enhanced replacement performance levels
21 associated with the merger, procurement or replacement savings, enhanced leak reduction

⁸⁴ Verified Joint Petition, p. 10, ¶24.

⁸⁵ Verified Joint Petition, p. 10, ¶24.

⁸⁶ Verified Joint Petition, p. 10, ¶24.

⁸⁷ Direct Testimony of Hank P. Linginfelter, 10:11-14.

1 targets, nor any other incremental program benefit. Thus, the Joint Petitioners'
2 commitments on this topic cannot be said to be incremental nor in keeping with the Board's
3 merger standards of review.

4 **Q. PLEASE SUMMARIZE YOUR POLICY RECOMMENDATIONS ON THE**
5 **PROPOSED MERGER.**

6 A. From a policy perspective, the Joint Petitioners have not met their burden of proof to show
7 that the merger will result in positive net ratepayer benefits. A number of the merger
8 commitments, while necessary to protect ETG's ratepayers and employees from adverse
9 impacts, do not provide an incremental benefit relative to the status quo. Maintaining
10 existing infrastructure replacement programs is an example of such a commitment. Many
11 other commitments, like those associated with following the Board's affiliate rules, or
12 providing safe, reliable and economic service, are commitments required of any regulated
13 utility and are not special, unique incremental benefits associated with the merger. Several
14 other commitments, like the commitments to pass along synergy savings, or preserve
15 service quality and reliability, are open-ended and not backed by any performance-based
16 measures and penalties for non-compliance that go beyond what already exists in New
17 Jersey. The uncertainties associated with these commitments, along with the uncertainty
18 of regulating a new utility acquired by a new parent corporation located at considerable
19 distance from New Jersey, creates a degree of risk that, at least from a qualitative
20 perspective, do not appear to offset the small, one-time \$6 million credit ratepayers will
21 receive through ETG's BGSS rates. These deficiencies, collectively, results in a proposed
22 merger that does not meet the Board's net benefits merger standard of review, and should
23 be rejected.

1 **V. RATEPAYER MERGER CREDIT**

2 **Q. PLEASE EXPLAIN THE JOINT PETITIONERS' PROPOSAL TO CREATE A \$6**
3 **MILLION RATEPAYER CREDIT.**

4 A. The Joint Petitioners are proposing to create a \$6 million credit that will be passed along
5 to ratepayers through the AMA contract ETG has with its affiliate, SEM.⁸⁸ The Joint
6 Petitioners are offering this credit as a means of creating a positive net benefit for
7 ratepayers from the merger.⁸⁹ The Joint Petitioners have not indicated how, nor over what
8 time period, this credit will be provided to ratepayers. The Joint Petitioners have indicated
9 that this \$6 million credit will be in addition to other payments and credits due to ratepayers
10 through the AMA contract.⁹⁰

11 **Q. IS THE PROPOSED RATEPAYER CREDIT THE RESULT OF ANY SYNERGY**
12 **SAVINGS ARISING FROM THE PROPOSED MERGER?**

13 A. No. The Joint Petitioners have indicated that the \$6 million has nothing to do with any fuel
14 procurement savings nor merger-related efficiencies.⁹¹ The proposed one-time ratepayer
15 credit is simply a payment that is being offered by the Joint Petitioners for purposes of
16 meeting what they believe is the Board's net benefits standard of review.

17 **Q. DO SYNERGY SAVINGS TYPICALLY ARISE IN UTILITY MERGERS?**

18 A. Yes, although the size and the time period over which these synergies arise will vary based
19 upon the particulars of any individual merger. Typically, synergy savings are the result of
20 increased efficiencies arising from the consolidation of utility operations, an improvement

⁸⁸ Docket No. GM15101196, In the Matter of the Merger of the Southern Company and AGL Resources, Inc., Joint Petition, filed October 16, 2015, p. 3.

⁸⁹ Joint Petitioners' response to RCR-POL-20.

⁹⁰ Joint Petitioners' response to RCR-COM-11.

⁹¹ Joint Petitioner's response to RCR-POL-20.

1 in planning, management, and operational activities due to the sharing of best practices,
2 and potentially from a larger scale of utility operations. Collectively, these merger-
3 generated efficiencies are referred to as “synergy” savings and often serve as an important
4 basis for an acquisition or merger. Synergy savings should create benefits for both
5 shareholders and ratepayers. In past utility regulatory proceedings, regulators have often
6 relied upon the commitments associated with the degree, scope, allocation, and certainty
7 of these synergy savings as a basis for approval of acquisitions and merger.

8 **Q. ARE THESE MERGER-RELATED SYNERGY SAVINGS USUALLY SHARED**
9 **AND PASSED ALONG TO RATEPAYERS?**

10 A. Yes. Historically, merger-related synergy savings have been passed along to ratepayers in
11 two primary fashions. First, these savings can be tracked through an explicit regulatory
12 mechanism that requires utilities to report such savings on a forward-going basis for some
13 fixed period of time. This approach was commonly used throughout the 1980s and 1990s.
14 Many utilities, as well as regulatory commissions, found the approach cumbersome and
15 subject to contention leading to a second or alternative approach of just simply passing
16 along synergy savings to ratepayers through various forms of direct credits. Such an
17 approach helps to remove the contention of measuring and monitoring synergy savings and
18 reduces ratepayer risk of attaining merger-related benefits since ratepayers are provided
19 with a guaranteed payment, regardless of whether these savings ever materialize in the
20 future.

21 **Q. HAVE THE JOINT PETITIONERS MADE ANY SYNERGY SAVINGS**
22 **ESTIMATES OR COMMITMENTS IN THIS PROCEEDING?**

1 A. No. The Joint Petitioners have not made any synergy savings commitments in this
2 proceeding. The Joint Petitioners have stated that the proposed merger is not based on
3 merger synergies.⁹² Instead, the Joint Petitioners’ have asserted that even though
4 opportunities for efficiencies may be achieved they “do not believe that savings associated
5 with these efficiencies will be significant.”⁹³ The Joint Petitioners’ inability to identify any
6 significant merger synergies, and share such synergies with ETG’s ratepayers, underscores
7 the fact that there will be no positive net benefits associated with this merger and that the
8 merger does not meet the Board’s net benefits standard of review.

9 **Q. HAVE THE JOINT PETITIONERS CONDUCTED ANY PRELIMINARY**
10 **SYNERGY STUDIES?**

11 A. No. The Joint Petitioners have not completed any synergy studies.⁹⁴ In fact, the Joint
12 Petitioners state that they are “still in the early stages of assessing how best to integrate
13 [AGLR and Southern’s] respective organizations.”⁹⁵ The Joint Petitioners’ repeated
14 refrain in this proceeding has been that it is too early to estimate any synergy savings and
15 that it would be speculative to attempt to put a value on any of these savings or even to
16 estimate when savings might appear,⁹⁶ and that the proposed merger is actually not
17 premised upon the generation of any post-merger synergies.⁹⁷ The Joint Petitioners have
18 been quite persistent in expressing this view, and have not been willing to provide any
19 information that would assist Rate Counsel or the Board in understanding what, if any,

⁹² Verified Joint Petition, p. 11, ¶26. See also Joint Petitioners’ response to RCR-S-ETG-EMP-12, RCR- S-ETG-EMP-13, RCR-COM-22, RCR-GOV-9, RCR-POL-13, and RCR-POL-20.
⁹³ Verified Joint Petition, p. 11, ¶26.
⁹⁴ Joint Petitioners’ response to S-ECON-32; see also, Joint Petitioners’ response to RCR-POL-22.
⁹⁵ Joint Petitioners’ response to RCR-POL-22.
⁹⁶ See, Verified Joint Petition, p. 2, fn. 2 and p. 11, ¶26; Joint Petitioners’ response to RCR-POL-6.
⁹⁷ Joint Petitioners’ response to RCR-POL-22.

1 potential future efficiencies may arise and accrue to the benefit of ETG’s ratepayers as a
2 result of this merger.

3 **Q. WHY DO THE JOINT PETITIONERS ASSERT THAT VERY FEW MERGER**
4 **SYNERGIES WILL MATERIALIZE AS A RESULT OF THE PROPOSED**
5 **MERGER?**

6 A. The Joint Petitioners explained in a discovery conference that Southern consists of a
7 number of vertically integrated electric utilities and differs, as a utility business model,
8 from AGLR which consist of not only natural gas distribution companies, but also a set of
9 natural gas mid-stream assets and trading operations. The Joint Petitioners have explained
10 that Southern does not own nor have any interest in other natural gas utilities outside of
11 those it will acquire with the purchase of AGLR.⁹⁸ Because of this disparity of interest,
12 the Joint Petitioners do not believe there are significant opportunities to find synergy
13 savings (or efficiencies) through the proposed integration.

14 **Q. DOES THE JOINT PETITIONERS’ COMMITMENT TO PASSING ALONG**
15 **FUTURE SYNERGY SAVINGS IN RATES PROVIDE A BENEFIT TO**
16 **RATEPAYERS?**

17 A. No. This commitment does not represent a meaningful incremental ratepayer benefit for a
18 number of reasons. First, and most significant, is that the Joint Petitioners’ commitment
19 does not consider the likelihood that any future synergies, to the extent they arise, will
20 likely require additional costs. Second, the Joint Petitioners have yet to identify, much less
21 quantify, the costs of integration.⁹⁹ Third, the Joint Petitioners have not committed to do
22 anything more than incorporate synergy savings, to the extent they arise, into rates at some

⁹⁸ See, Direct Testimony of Henry P. Linginfelter, 17:22 through 18:2.

⁹⁹ Joint Petitioners’ response to RCR-POL-14.

1 unknown date in the future. There are no assurances that these savings will ever arise, and
2 even if they do arise, there are no assurances that the savings will be higher than the costs
3 to achieve these potential synergies at the time they are purportedly included in rates.

4 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING THE RECOVERY**
5 **OF INTEGRATION COSTS?**

6 A. Yes. ETG's ratepayers should not be required to pay for integration costs in the absence
7 of a demonstration of the synergy savings these costs are designed to achieve. Such an
8 outcome would transfer the operational risks of obtaining net cost efficiencies onto ETG's
9 ratepayers. The Joint Petitioners, at a minimum, should be prohibited from seeking future
10 cost recovery of any so-called synergy costs to achieve, until and unless they can prove
11 that these costs have resulted in net synergy savings. ETG should be required to track all
12 costs to achieve expenses and resulting synergy savings, and recover only those expenses
13 less than ultimate cost savings delivered to ETG's ratepayers.

14 **Q. HAVE ANY OTHER COMMISSIONS RECENTLY REQUIRED UTILITIES TO**
15 **PROVE ANY NET SYNERGY SAVINGS?**

16 A. Yes. On August 6, 2014, Wisconsin Energy Corporation ("WE") filed an application with
17 the Public Service Commission of Wisconsin ("Wisconsin PSC") requesting approval to
18 acquire Integrys Energy.¹⁰⁰ The Wisconsin PSC noted that there was a relationship
19 between costs to achieve and synergy savings,¹⁰¹ and ordered WE to identify and track all

¹⁰⁰ Application of Wisconsin Energy Corporation for Approval to Acquire the Outstanding Common Stock of Integrys Energy Group, Inc., Public Service Commission of Wisconsin Docket No. 9400-YO-100, Final Decision dated May 21, 2015.

¹⁰¹ Application of Wisconsin Energy Corporation for Approval to Acquire the Outstanding Common Stock of Integrys Energy Group, Inc., Public Service Commission of Wisconsin Docket No. 9400-YO-100, Final Decision dated May 21, 2015, p. 19.

1 costs to achieve, and pass along to ratepayers all acquisition synergy savings net of the
2 transition costs to achieve those savings.¹⁰² The Wisconsin Commission restricted the
3 recovery of any costs to achieve (or transition costs) beyond the acquisition-related savings
4 realized through the acquisition.¹⁰³

5 Further, the Wisconsin Utilities may recover transition costs in rates
6 only if and to the extent that such costs are: (1) incurred by or
7 allocated to each of the utilities; (2) associated with the financial
8 benefits that each utility's ratepayers will receive as a result of the
9 acquisition; and (3) the acquisition-related savings realized by each
10 utility's ratepayers are equal to or greater than its transition costs.¹⁰⁴

11 **Q. HAVE ANY OTHER RECENTLY-PROPOSED ELECTRIC/NATURAL GAS**
12 **UTILITY MERGERS PROVIDED ANY SYNERGY SAVINGS ESTIMATES?**

13 A. Yes. The Joint Petitioners have repeatedly asserted that synergy savings are unlikely given
14 the proposed combination of two different utility business models. However, on January
15 15, 2016, Duke Energy Corporation ("Duke Energy") filed a petition with the Tennessee
16 Regulatory Authority ("TRA") to acquire Piedmont Natural Gas Company ("Piedmont"),
17 and incorporate the entity into its larger operations.¹⁰⁵ Piedmont is a natural gas utility
18 operating in the states of Tennessee, North Carolina and South Carolina.¹⁰⁶ Duke Energy's

¹⁰² Application of Wisconsin Energy Corporation for Approval to Acquire the Outstanding Common Stock of Integrys Energy Group, Inc., Public Service Commission of Wisconsin Docket No. 9400-YO-100, Final Decision dated May 21, 2015, p. 20.

¹⁰³ Application of Wisconsin Energy Corporation for Approval to Acquire the Outstanding Common Stock of Integrys Energy Group, Inc., Public Service Commission of Wisconsin Docket No. 9400-YO-100, Final Decision dated May 21, 2015, p. 20.

¹⁰⁴ Application of Wisconsin Energy Corporation for Approval to Acquire the Outstanding Common Stock of Integrys Energy Group, Inc., Public Service Commission of Wisconsin Docket No. 9400-YO-100, Final Decision dated May 21, 2015, p. 20. Emphasis added.

¹⁰⁵ Application of Duke Energy Corporation and Piedmont Natural Gas Company, Inc. for Approval of a Change in Control Pursuant to T.C.A. § 65-4-113, Tennessee Regulatory Authority Docket No. 16-00006, Application.

¹⁰⁶ Application of Duke Energy Corporation and Piedmont Natural Gas Company, Inc. for Approval of a Change in Control Pursuant to T.C.A. § 65-4-113, Tennessee Regulatory Authority Docket No. 16-00006, Application, pp. 1-2.

1 utility operations are significantly oriented to vertically integrated electric utility service
2 and competitive generation.

3 **Q. WAS DUKE’S TRA FILING PREDICATED ON PROVIDING NET BENEFITS?**

4 A. Yes. Duke provided a cost-benefit analysis that documented all of the merger’s expected
5 benefits and costs.¹⁰⁷ Duke quantified over \$9.0 million in annual economic benefits that
6 it characterized as “on-going” that were offset by over \$4 million in one-time integration
7 costs.¹⁰⁸ Importantly, a substantial portion of estimated benefits associated with the merger
8 were predicated upon the efficiencies generated in support services such as the
9 consolidation of outside legal counsel and auditing staff, and the consolidation of insurance
10 costs.¹⁰⁹

11 **Q. WILL THE JOINT PETITIONERS’ COMMITMENT TO CONDUCT A FUTURE
12 COST-REVENUE ANALYSIS RESULT IN ANY NET RATEPAYER BENEFITS?**

13 A. No. While the Joint Petitioners have stated a willingness to provide this cost-revenue
14 analysis to the Board prior to ETG’s upcoming rate case, their Petition and direct
15 testimonies are silent on the details or the exact information that will be provided in this
16 report. In response to discovery, the Joint Petitioners clarified that the cost-revenue study
17 will consist of detailed financial information for a test period, similar to that provided
18 during a rate case.¹¹⁰ The only difference between information typically provided during

¹⁰⁷ Application of Duke Energy Corporation and Piedmont Natural Gas Company, Inc. for Approval of a Change in Control Pursuant to T.C.A. § 65-4-113, Tennessee Regulatory Authority Docket No. 16-00006, Application, pp. 5-6.

¹⁰⁸ Application of Duke Energy Corporation and Piedmont Natural Gas Company, Inc. for Approval of a Change in Control Pursuant to T.C.A. § 65-4-113, Tennessee Regulatory Authority Docket No. 16-00006, Application, Exhibit E.

¹⁰⁹ Application of Duke Energy Corporation and Piedmont Natural Gas Company, Inc. for Approval of a Change in Control Pursuant to T.C.A. § 65-4-113, Tennessee Regulatory Authority Docket No. 16-00006, Application, Exhibit E.

¹¹⁰ Company’s response to RCR-POL-18.

1 a rate case and the proposed detailed cost and revenue study would be information
2 pertaining to an embedded cost of service study and a schedule of proposed rates and
3 resulting bill impacts.¹¹¹

4 **Q. IS THE PROPOSED REVENUE-COST STUDY A POSITIVE NET RATEPAYER**
5 **BENEFIT?**

6 A. No. The Joint Petitioners limit their willingness to perform the referenced study within the
7 first two years subsequent the close of the proposed merger.¹¹² However, this commitment
8 is not consistent with other statements asserting that the Joint Petitioners do not expect to
9 see “savings from future consolidation of services to be material during the first several
10 years following the closing of the merger.”¹¹³ By the Joint Petitioners’ own admission,
11 future synergy savings, to the extent they do arise, will only be significant in the long term,
12 and not within the first two years after the close of the proposed merger. Therefore, the
13 proposed cost-revenue study will be of little to no value.

14 **Q. HOW IS THE PROPOSED \$6 MILLION RATEPAYER CREDIT DETERMINED**
15 **IF NOT BY ANY SYNERGY SAVINGS ESTIMATES?**

16 A. The \$6 million ratepayer credit appears to have been determined on a subjective basis, as
17 one high enough to pass what the Joint Petitioners are interpreting as the Board’s net
18 benefits standard of review.¹¹⁴ The \$6 million ratepayer credit is not accompanied by any
19 source documentation,¹¹⁵ and is admittedly unrelated to any estimated synergy or cost
20 savings.¹¹⁶ Further, the Joint Petitioners have provided no information on the ultimate

¹¹¹ Company’s response to RCR-POL-18.

¹¹² Verified Joint Petition, p. 11, ¶26.

¹¹³ Direct Testimony of Mark S. Lantrip, 5:12-16. Emphasis added.

¹¹⁴ A discovery conference was held between the Joint Petitioners, Rate Counsel, and Board Staff on February 19, 2016.

¹¹⁵ Joint Petitioner’s response to RCR-COM-18.

¹¹⁶ Joint Petitioner’s response to RCR-POL-20.

1 source of the funds that will be used to pay the \$6 million credit: it is unclear whether this
2 proposed credit will be financed by funding from ETG, SEM, AGLR or Southern.

3 **Q. ARE THE JOINT PETITIONERS MAKING SIMILAR OFFERS TO OTHER**
4 **AGLR GAS DISTRIBUTION COMPANIES?**

5 A. Yes, in some jurisdictions, but not all. For instance, the Joint Petitioners indicated in a
6 discovery conference that a similar credit would be offered in Maryland, but for an amount
7 of only \$50,000 since this state had a net benefits standard of review similar, in part, to
8 New Jersey's standard.¹¹⁷ The amount of this credit has since doubled increasing from
9 \$50,000 to \$100,000 as part of the Stipulation and Settlement Agreement filed by the
10 parties in the Maryland proceeding.¹¹⁸ However, the Joint Petitioners also indicated that
11 they were not offering these credits in states that only utilized "no net harm" standards of
12 review for merger approval, such as Illinois.

13 **Q. HOW WILL THE ADDITIONAL \$6 MILLION RATEPAYER CREDIT BE**
14 **DISTRIBUTED AMONG RATEPAYERS?**

15 A. The Joint Petitioners have not provided any details on how the incremental \$6 million
16 credit will be allocated to ratepayers. The credit is designed to be passed along through
17 the AMA contract with ETG, but, to date, the Joint Petitioners have not drafted any
18 amendments to the AMA to account for the proposed merger commitment¹¹⁹ nor have the
19 Joint Petitioners determined how the \$6 million credit will be distributed over the
20 remaining term of the AMA contract.¹²⁰

¹¹⁷ A discovery conference was held between the Joint Petitioners, Rate Counsel, and Board Staff on February 19, 2016.

¹¹⁸ In the Matter of the Merger of the Southern Company and AGL Resources, Inc., Maryland Public Service Commission Case No. 9404, Stipulation and Settlement Agreement, February 24, 2016, p. 2.

¹¹⁹ Joint Petitioners' response to RCR-COM-14 and RCR-COM-15.

¹²⁰ Joint Petitioners' response to RCR-COM-13.

1 **Q. WHY ARE THE JOINT PETITIONERS USING THE AMA INSTEAD OF A**
2 **DIRECT BILL CREDIT?**

3 A. The Joint Petitioners have not provided any specific information explaining why they chose
4 to utilize the AMA other than their belief that this has served as a good vehicle in the past
5 for making transfers to ratepayers.¹²¹ Specifically, the Joint Petitioners stated that they:

6 ...believe that because the AMA has historically brought significant
7 value to Elizabethtown’s customers, the proposed modification of
8 the AMA to effectuate the \$6 million payment is the most
9 appropriate way to bring future value to Elizabethtown’s customers
10 and satisfy the positive benefit requirement.¹²²

11 **Q. WILL ALL RATEPAYERS SHARE IN THIS \$6 MILLION CREDIT?**

12 A. No. If the Joint Petitioners allocate the proposed credit in a fashion similar to the current
13 structure of the AMA, customers that purchase their gas from third party suppliers will
14 receive no benefits since they are not BGSS customers. Shared margins from SEM,
15 credited to ETG through the AMA, are allocated to customers through the BGSS-P charge,
16 which is only applicable to Residential Delivery Service (“RDS”), Small General Service
17 (“SGS”), and Gas Light Service (“GLS”) customers.¹²³ Therefore, customer classes that
18 are served under the BGSS-M (monthly) charge will also not share in the benefits of the
19 proposed credit since the Joint Petitioners’ are only proposing to apply this credit to the
20 BGSS-P charge.

21 **Q. IS THE \$6 MILLION RATEPAYER CREDIT A POSITIVE NET BENEFIT?**

22 A. No. While the \$6 million ratepayer credit appears, on its face, to be an incremental benefit
23 of the merger, it is not entirely clear, at this point, whether or not this credit is the direct

¹²¹ Joint Petitioner’s response to RCR-POL-20.

¹²² Joint Petitioner’s response to RCR-POL-20.

¹²³ BGSS Rate History, Elizabethtown Gas, available online at: <https://www.elizabethtowngas.com/rates-and-tariff/bgss-rate-history>.

1 result of the merger or some other unrelated financial transfer. As noted earlier, SEM is
2 required to make minimum payments (\$4.25 million) to ETG's ratepayers through the
3 AMA, the costs of which are passed through the BGSS. SEM, or even AGLR, could, in
4 theory, increase these payments much like ETG could at any time increase their charitable
5 contributions without a merger.

6 **Q. WOULD YOU PLEASE COMMENT ON THE JOINT PETITIONERS'**
7 **STATEMENTS THAT THIS TRANSFER WOULD NOT ARISE "BUT FOR" THE**
8 **MERGER?**

9 A. Yes. The Joint Petitioners have explicitly stated that the proposed \$6 million payment
10 would not materialize but for the merger.¹²⁴ However, it is difficult to verify this assertion
11 given the fact that the \$6 million is not based upon any estimated synergy savings, nor any
12 other merger-related efficiencies and, as noted earlier, it is entirely unclear where the
13 source of these funds will originate. Until such information is clarified, the Board should
14 consider these benefits as not meeting its net benefits merger standards.

15 **Q. IS THE PROPOSED \$6 MILLION RATEPAYER CREDIT SUFFICIENT TO**
16 **MEET THE BOARD'S MERGER REVIEW STANDARDS?**

17 A. No. The proposed \$6 million is insufficient to meet the Board's merger review standards
18 since, as I have discussed earlier, (1) it is unclear whether or not this ratepayer credit is
19 really the result of the merger and (2) the overall financial level of the ratepayer credit is
20 very small relative to the performance risk of the merger. In addition, the proposed \$6
21 million credit also appears small relative to the size of the overall transaction and the
22 benefits accruing to the Joint Petitioners' shareholders. Schedule DED-1 estimates the

¹²⁴ Joint Petitioners' response to RCR-COM-17.

1 ETG share of the overall \$2.1 billion acquisition premium associated with the entire
2 purchase of AGLR. The estimated ETG share of this premium is over \$155 million.
3 Clearly, a significant share of this premium would need to accrue to shareholders, but a
4 good part of ETG's enterprise value has been developed as a result of its New Jersey
5 operations and New Jersey ratepayers should receive an appropriate credit to reflect their
6 contributions in the creation of this enterprise value, an issue discussed in greater detail in
7 Mr. Rosencranz's testimony. For instance, just 10 percent of ETG's share of the
8 acquisition premium is around \$15.5 million, with 20 percent being over \$30 million.
9 These are amounts that are far greater than the \$6 million being offered by the Joint
10 Petitioners through their application. This is particularly striking since by the Joint
11 Petitioners' own statements, the purpose of the proposed credit is to meet the Board's
12 merger standards requiring the proposed transaction to provide benefits to New Jersey
13 ratepayers.

14 **Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING THE JOINT**
15 **PETITIONERS' PROPOSED \$6 MILLION RATEPAYER CREDIT?**

16 A. I recommend that the Board reject the Joint Petitioners' proposed merger. The Joint
17 Petitioners hold out the \$6 million credit as being the definitive incremental benefit
18 associated with the proposed merger, however, they are unable to definitively point to a
19 merger-related activity or financial source for this potential credit. Equally important is
20 that the \$6 million ratepayer credit is too small, particularly relative to the performance
21 risks being imposed on ratepayers as a result of this merger. This credit, for instance,
22 amounts to less than four percent of the ETG's pro-rata share of the transaction's overall
23 acquisition premium, which is in excess of \$155 million.

1 **Q. HOW SHOULD THE RATE CREDIT DETERMINED BY THE BOARD BE**
2 **PASSED ALONG TO CUSTOMERS?**

3 A. I recommend the rate credit ultimately determined by the Board be distributed to all
4 customers in the form of a direct rate credit on their bills, not through the BGSS because
5 not all customers receive Periodic BGSS service.

6 **Q. ARE THE JOINT PETITIONERS' ASSERTIONS ABOUT FUTURE MERGER**
7 **SYNERGY SAVINGS SUFFICIENT TO MEET THE BOARD'S STANDARDS OF**
8 **REVIEW?**

9 A. No. The Joint Petitioners provide assertions that some synergy savings may be achieved
10 in the future as a result of the proposed merger.¹²⁵ However, these assertions do not provide
11 ratepayers with any known and measurable benefits, and ultimately shift merger-related
12 performance risk onto ratepayers. There is nothing to hold the Joint Petitioners accountable
13 for such operating performance failures if they fail to deliver any synergy savings through
14 the proposed merger. The Joint Petitioners' aspirations to potentially achieve some
15 unknown level of synergy savings at some unknown date in the future cannot be viewed as
16 a positive benefit since these anticipated savings do not represent a new or incremental
17 ratepayer benefit, and the \$6 million ratepayer credit offered by the Joint Petitioners is not
18 large enough to offset the performance-related risks associated with their synergy savings
19 promises. As a result, the Board should reject the proposed merger as not meeting its
20 merger standards of review.

¹²⁵ See, Verified Joint Petition, p. 2, fn. 2 and p. 11, ¶26.

1 **VI. INFRASTRUCTURE AND RELIABILITY COMMITMENTS**

2 **Q. PLEASE DISCUSS THE JOINT PETITIONERS INFRASTRUCTURE AND**
3 **RELIABILITY COMMITMENTS.**

4 A. The Joint Petitioners have stated that the proposed merger will not diminish nor negatively
5 impact ETG's current commitment to accelerate the replacement of the Company's
6 infrastructure.¹²⁶ The Joint Petitioners have also asserted that the combined companies'
7 strong credit profile will enable ETG to continue to invest in the necessary capital and
8 infrastructure projects needed to ensure safe and adequate service.¹²⁷ Additionally, the
9 Joint Petitioners' have indicated that ETG's commitment to proceed with its proposed
10 SMART Program, a ten year infrastructure modernization program, will not be impacted
11 by the merger.¹²⁸

12 **Q. SHOULD THE COMMITMENT TO CONTINUE ETG'S INFRASTRUCTURE**
13 **INVESTMENTS AND PROPOSED SMART PROGRAM BE ATTRIBUTABLE TO**
14 **THE MERGER?**

15 A. No. These investments would have taken place absent the proposed merger. ETG as a
16 regulated utility has the obligation to provide safe and reliable service; therefore
17 infrastructure investments would be necessary regardless of the merger. ETG has a Board-
18 approved order on its current infrastructure plan and must remain in compliance with this
19 plan until such time that it is changed. It appears from the Joint Petitioners' statements
20 that, to the extent any infrastructure initiatives change after the merger closing date, those
21 changes will originate from AGLR, not from Southern.¹²⁹

¹²⁶ Hank Linginfelter, Direct Testimony, 16:22-23 and 17:1-3.

¹²⁷ Verified Joint Petition, p. 2 ¶3.

¹²⁸ Hank Linginfelter, Direct Testimony, 12:2-3.

¹²⁹ Joint Petitioners' response to RCR-COM-24 and Joint Petitioners' response to RCR-COM-25.

1 **Q. DID ETG HAVE AN INFRASTRUCTURE REPLACEMENT PROGRAM IN**
2 **PLACE PRIOR TO THE ANNOUNCEMENT OF THE PROPOSED MERGER?**

3 A. Yes. Since the late 1990s, ETG has undertaken a number of infrastructure replacement
4 programs. These programs enabled ETG to retire all of its elevated pressure cast iron mains
5 up to 12” diameter as well as portions of its low pressure cast iron mains. Under the
6 Accelerated Infrastructure Replacement (“AIR”) and the ETG Natural Gas Distribution
7 Utility Reinforcement Effort (“ENDURE”) programs, ETG is retiring roughly 74 miles of
8 low pressure cast iron main under the AIR Program, and approximately 10 miles of mains
9 of the same material under ENDURE.¹³⁰ According to ETG, “[t]hese programs have
10 enhanced, and will continue to enhance, the safety and reliability of ETG’s distribution
11 system in an efficient manner while also providing economic development, job growth and
12 retention, and environmental benefits.”¹³¹ ETG’s recently proposed SMART Program,¹³²
13 and its existing AIR and ENDURE programs were proposed and planned prior to the
14 merger. Thus, any benefits arising from these programs are the result of Board-approved
15 initiatives that had nothing to do with the proposed merger and none of these programs
16 should be considered as meeting the Board’s net benefits standard for merger approval.

17 **Q. WOULD YOU PLEASE COMMENT ON THE COST RECOVERY**
18 **MECHANISMS PROVIDED FOR ETG’S INFRASTRUCTURE PROGRAMS?**

19 A. The costs of these programs have largely been recovered through special rate mechanisms
20 that significantly reduce ETG’s financial risks. The proposed SMART program, if

¹³⁰ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of a Safety, Modernization and Reliability Program and Associated Cost Recovery Mechanism, BPU Docket No. GR15091090, Application, p. 4, ¶7.

¹³¹ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of a Safety, Modernization and Reliability Program and Associated Cost Recovery Mechanism, BPU Docket No. GR15091090, Application, p. 4, ¶7.

¹³² The SMART program has not yet been approved by the New Jersey Board of Public Utilities.

1 approved, would also be funded through a special rate mechanism. The reduced risks
2 inherent in ETG’s infrastructure programs would be transferred if the merger is approved.

3 **Q. HAVE THE JOINT PETITIONERS MADE ANY QUALITY OF SERVICE OR**
4 **SYSTEM RELIABILITY COMMITMENTS?**

5 A. No. The only commitment made is that the “[m]erger will not adversely impact customers
6 in terms of customer service and the safety and reliability of the of the ETG natural gas
7 transmission and distribution system.”¹³³ In addition, the Joint Petitioners have stated that
8 they will maintain current levels of service quality and reliability after the merger.¹³⁴

9 **Q. SHOULD ETG’S SAFETY AND RELIABILITY REMAIN THE SAME POST**
10 **MERGER?**

11 A. No, they should improve. As indicated earlier, ETG recently filed an application with the
12 Board for approval of its SMART program in BPU Docket No. GR15091090.¹³⁵ In that
13 proceeding, the Company is requesting approval of a \$1.102 billion program to replace and
14 retire 630 miles of mains and approximately 67,000 services.¹³⁶ In the SMART
15 proceeding, ETG indicated that the “paramount” reason the Board should approve the
16 program is for the enhancement in the safety and reliability of the system,¹³⁷ not merely
17 maintenance of the status quo.

¹³³ Verified Joint Petition, p. 10, ¶24.

¹³⁴ Joint Petitioners response to RCR-CUS-18.

¹³⁵ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of a Safety, Modernization and Reliability Program and Associated Cost Recovery Mechanism, BPU Docket No. GR15091090.

¹³⁶ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of a Safety, Modernization, and Reliability Program and Associated Cost Recovery Mechanism, BPU Docket No. GR15091090, Application, p. 3.

¹³⁷ In the Matter of the Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas for Approval of a Safety, Modernization, and Reliability Program and Associated Cost Recovery Mechanism, BPU Docket No. GR15091090, Direct Testimony of Brian MacLean, 7:7-10.

1 **Q. WILL THE SMART PROGRAM REPRESENT A NEW, INCREMENTAL**
2 **MERGER BENEFIT?**

3 A. No. If the Company’s SMART program is approved, it, like the other earlier-discussed
4 infrastructure programs, will have nothing to do with the proposed merger. Any benefits
5 that may arise from the SMART program, if approved, will be a function of a plan proposed
6 in advance of the proposed merger. Further, the Joint Petitioners have made no assertions
7 nor commitments that the reliability and safety benefits of any current nor proposed
8 infrastructure program will be enhanced as a result of the proposed merger.

9 **Q. HAVE THE JOINT PETITIONERS MADE ANY COMMITMENTS**
10 **CONCERNING ETG PERSONNEL ASSOCIATED WITH THE ETG’S**
11 **OPERATIONS AND INFRASTRUCTURE PROGRAMS?**

12 A. No. Given ETG’s planned infrastructure programs, it is important that the Board ensure
13 that ETG has adequate engineering and project management resources to support these
14 pipeline replacement programs while continuing to properly operate and maintain ETG’s
15 system. If the merger is approved, the Board should make this a requirement to ensure safe
16 and adequate service.

17 **Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING THE JOINT**
18 **PETITIONERS’ INFRASTRUCTURE AND RELIABILITY COMMITMENTS?**

19 A. The Joint Petitioners’ infrastructure and reliability commitments do not represent a new,
20 incremental benefit, and should not be considered a merger-related “benefit.” I recommend
21 that the Board consider these commitments as maintaining the status quo, and not as a new,
22 incremental benefit.

1 **VII. SUMMARY OF RECOMMENDATIONS**

2 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

3 A. I recommend that the Board reject the proposed merger as filed. Quite simply, the merger
4 commitments made by the Joint Petitioners do not provide ratepayers with an adequate
5 level of new and incremental benefits as required by the Board’s merger standards of
6 review. Further, the Joint Petitioners have made a number of merger commitments that
7 shift a considerable amount of merger-related performance risk away from the utilities and
8 onto New Jersey ratepayers. Therefore, the Board should reject the proposed merger
9 offered by the Joint Petitioners as not being in the public interest.

10 **Q. COULD THE MERGER BE BROUGHT INTO THE PUBLIC INTEREST WITH**
11 **CERTAIN MODIFICATIONS?**

12 A. Yes, the proposed merger could be made consistent with the public interest if it were
13 modified in such a fashion that (1) resulted in new and substantial incremental ratepayer
14 benefits that would not arise but for the merger and (2) substantially reduced the
15 unnecessary regulatory, financial, and operating risks being imposed on ratepayers and
16 ETG’s employees under the Joint Petitioners’ current proposal. These modifications, and
17 the Rate Counsel witnesses sponsoring these alternative recommendations (identified in
18 parentheses below), include:

19 **Shareholder Financial Contribution Commitments**

- 20 • The \$6 million ratepayer credit proposed by Joint Petitioners, which will be passed
21 along through ETG’s Asset Management Agreement (“AMA”) with an affiliate, is
22 too small, particularly relative to the performance risks being imposed on
23 ratepayers as a result of this merger. This ratepayer credit amounts to less than
24 four percent of ETG’s pro-rata share of the transaction’s acquisition premium,
25 which is over \$155 million. The rate credit to customers should be significantly
26 large, and it should be a direct credit on customers’ bills and not passed through the

1 AMA, since not all customers would share in a credit passed through the AMA.
2 (Dismukes)

- 3 • The Joint Petitioners should agree to a most favored nations clause similar to the
4 one approved by the Board in the Exelon-PHI merger. (Dismukes)

5 **Corporate Governance Commitments**

- 6 • AGLR’s separate, outside Board of Directors should be granted complete
7 autonomy by Southern’s Board of Directors. Alternatively, Joint Petitioners should
8 maintain appropriate proportional representation of AGLR’s directors on
9 Southern’s Board of Directors. (Peterson)
- 10 • Joint Petitioners should maintain the outside Board of Directors for AGLR
11 indefinitely instead of “at least five years” after the merger. (Peterson)
- 12 • Joint Petitioners should be required to obtain Board approval for any change in the
13 organizational structure of AGLR’s Board of Directors. (Peterson)

14 **Employment and New Jersey Presence**

- 15 • Joint Petitioners should maintain at least 300 ETG employees in the State of New
16 Jersey for a minimum of five years. (Mugrace)
- 17 • Joint Petitioners should maintain the ETG call center in its current location in
18 Union, New Jersey permanently. (Mugrace)
- 19 • Joint Petitioners should maintain ETG’s two walk-in centers in Elizabeth and Perth
20 Amboy indefinitely, subject to Board approval to relocate or close any of these
21 centers. (Mugrace)
- 22 • Joint Petitioners should maintain the Customer Service Centers and the level of
23 employees located in the following areas of the Company’s service territory
24 indefinitely, subject to Board approval of changes to staffing and any relocation or
25 closure. (Mugrace)
 - 26 ○ Stewartsville, New Jersey – 35 employees
 - 27 ○ Flemington, New Jersey – 14 employees
 - 28 ○ Newtown, New Jersey – 7 employees
 - 29 ○ Union, New Jersey¹³⁸ - 179 employees¹³⁹
- 30 • The Joint Petitioners should maintain sufficient staffing at all Customer Service
31 Centers to adequately address and respond to customers issues and maintain the
32 level of service required by the Board beyond the post-test year closing period.
33 (Mugrace)
- 34 • The Joint Petitioners should maintain adequate levels of professional engineering
35 and supervisory staff to properly operate ETG’s system while also maintaining

¹³⁸ The Company maintains one call center at this location. Employee numbers are a mix of executive, operating and customer service personnel.

¹³⁹ Response to RCR-CUS-1.

1 ETG’s current infrastructure replacement and improvement programs and the
2 anticipated performance outcomes upon which those programs, and their approvals,
3 were based. (Dismukes)

4 **Service Company/Affiliates Relationship Commitments**

- 5 • The Joint Petitioners should be required to submit a detailed operating plan that
6 identifies with specificity the services to be provided to ETG by Southern Company
7 Services (“SCS”) and AGL Service Company (“AGSC”). (Peterson)
- 8 • The Board should approve all service agreements between SCS and AGSC.
9 (Peterson)
- 10 • Service company charges to ETG should be capped at the 2015 level for the next
11 five years. (Peterson)
- 12 • Any significant changes in the SCS service agreement with AGLR must be
13 approved by the Board. (Peterson)

14 During the remaining term of the current AMA, SEM should be prohibited from
15 using the ETG gas assets to supply natural gas to an affiliated generating facility.
16 (Rosenkranz)

- 17 • ETG should be prohibited from entering into any future agreements for natural gas
18 asset management services with an affiliate after the existing AMA expires.
19 (Rosenkranz)

20 **Service Quality Commitments**

- 21 • Joint Petitioners must dedicate the resources, the dollars and the methods and
22 processes in order to maintain and further enhance the current level of performance
23 and prevent any backsliding or degradation of customer service. (Mugrace)
- 24 • ETG should be required to achieve and maintain its metric of no more than 1
25 complaint per 1,000 customers annually, or 282 customer complaints,¹⁴⁰ as required
26 by the 2009 Base Rate Order. ETG should commit to comply with this Board
27 directive within one year. (Mugrace)
- 28 • The Joint Petitioners should be required to meet and comply with the 2009 Base
29 Rate Order and meet the 95% of calls responded to with respect to Leak/Odor
30 response at all times including nights and weekends. For all calls not responded to
31 within 60 minutes, the ETG should provide reasons for the delay. The Joint
32 Petitioners should commit to meeting this benchmark within one year. (Mugrace)

¹⁴⁰ 282,000 current customers /1,000 per customer /contact.

1 **Ring Fencing, Financial Commitments, and Cost Commitments**

- 2 • Southern’s merger financing-related costs (e.g., equity underwriting fees) should
3 not be imposed on or recovered from the Company’s ratepayers. (Kahal)
- 4 • In any future rate filings, where a ratemaking rate of return is at issue, ETG must
5 include the Southern consolidated capital structure (for informational purposes)
6 along with supporting capitalization data. (Kahal)
- 7 • Rate Counsel should retain its rights concerning capital structure recommendations
8 in future ETG rate proceedings, including the potential use of a Southern
9 consolidated capital structure. (Kahal)
- 10 • The Joint Petitioners should commit to retain existing corporate structure, practices,
11 and “ring fencing” and should not be permitted to change these structures or
12 practices without prior Board approval. (Kahal)
- 13 • In the event Southern affiliate actions or risks cause an increase in the AGLR/ETG
14 cost of capital, that increase should not be borne by ETG customers. Specifically,
15 there should be no cost premium related to Southern’s generation supply imposed
16 on ETG customers. (Kahal)
- 17 • The Board should retain its authority to penalize the Joint Petitioners if they violate
18 the Board’s order resulting from this proceeding or any other Board policy, order
19 or rule. This penalty could include, but not be limited to, a reduced allowed rate of
20 return in future rate proceedings. (Dismukes)
- 21 • The Joint Petitioners should not be allowed to recover the merger’s acquisition
22 premium (or “goodwill”) from ETG’s ratepayers. (Kahal)
- 23 • All goodwill-related equity should be excluded from the ratemaking capital
24 structure even if AGL capitalization continues to be used. (Kahal)
- 25 • AGL must strive to maintain a reasonable and prudent capital structure, excluding
26 goodwill. Goodwill should not be used as a basis for AGL to dramatically increase
27 leverage and shift funds to Southern Co. parent. (Kahal)

28 **Synergies**

- 29 • Joint Petitioners should agree to separately track merger synergies and costs to
30 achieve for a period of five years. These estimates must be provided in future rate
31 case proceedings before the Board. (Dismukes)
- 32 • ETG should be prohibited from seeking future cost recovery of any cost to achieve
33 synergy savings unless it demonstrates that those costs have resulted in net synergy
34 savings delivered to ratepayers. (Dismukes)

35 **Competition**

- 36 • Southern should provide an analysis of vertical and horizontal market power issues
37 that may arise as a result of the merger and the Board should retain authority to
38 implement remedial measures, if necessary. (Chang)

- 1 • Southern should provide a report to the Board pertaining to pipeline contracts and
2 prices for any future natural gas-fired generation units that it may acquire or
3 develop within the PJM footprint. (Chang)

4 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY FILED ON**
5 **MARCH 11, 2016?**

6 A. Yes, this concludes my testimony at this time. I reserve the right to supplement my
7 testimony should new and/or additional information or evidence become available.

APPENDIX A

Professional Qualifications

DAVID E. DISMUKES, PH.D.

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Director of Policy Analysis
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EDUCATION

Ph.D., Economics, Florida State University, 1995.
M.S., Economics, Florida State University, 1992.
M.S., International Affairs, Florida State University, 1988.
B.A., History, University of West Florida, 1987.
A.A., Liberal Arts, Pensacola State College, 1985.

Master's Thesis: *Nuclear Power Project Disallowances: A Discrete Choice Model of Regulatory Decisions*

Ph.D. Dissertation: *An Empirical Examination of Environmental Externalities and the Least-Cost Selection of Electric Generation Facilities*

ACADEMIC APPOINTMENTS

Louisiana State University, Baton Rouge, Louisiana

Center for Energy Studies

2014-Current	Executive Director
2007-Current	Director, Division of Policy Analysis
2006-Current	Professor
2003-2014	Associate Executive Director
2001-2006	Associate Professor
1999-2001	Research Fellow and Adjunct Assistant Professor
1995-2000	Assistant Professor

College of the Coast and the Environment (Department of Environmental Studies)

2014-Current	Professor (Joint Appointment with CES)
2010-Current	Director, Coastal Marine Institute
2010-2014	Adjunct Professor

E.J. Ourso College of Business Administration (Department of Economics)

2006-Current	Adjunct Professor
2001-2006	Adjunct Associate Professor
1999-2000	Adjunct Assistant Professor

Florida State University, Tallahassee, Florida

College of Social Sciences, Department of Economics

1995 Instructor

PROFESSIONAL EXPERIENCE

Acadian Consulting Group, Baton Rouge, Louisiana

2001-Current Consulting Economist/Principal
1995-1999 Consulting Economist/Principal

Econ One Research, Inc., Houston, Texas

1999-2001 Senior Economist

Florida Public Service Commission, Tallahassee, Florida

Division of Communications, Policy Analysis Section

1995 Planning & Research Economist

Division of Auditing & Financial Analysis, Forecasting Section

1993 Planning & Research Economist
1992-1993 Economist

Project for an Energy Efficient Florida &
Florida Solar Energy Industries Association, Tallahassee, Florida

1994 Energy Economist

Ben Johnson Associates, Inc., Tallahassee, Florida

1991-1992 Research Associate
1989-1991 Senior Research Analyst
1988-1989 Research Analyst

GOVERNMENT APPOINTMENTS

2007-Current Louisiana Representative, Interstate Oil and Gas Compact
Commission; Energy Resources, Research & Technology
Committee.
2007-Current Louisiana Representative, University Advisory Board
Representative; Energy Council (Center for Energy,
Environmental and Legislative Research).
2005 Member, Task Force on Energy Sector Workforce and Economic
Development (HCR 322).
2003-2005 Member, Energy and Basic Industries Task Force, Louisiana
Economic Development Council
2001-2003 Member, Louisiana Comprehensive Energy Policy Commission.

PUBLICATIONS: BOOKS AND MONOGRAPHS

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2. *Distributed Energy Resources: A Practical Guide for Service.* (2000). With Ritchie Priddy. London: Financial Times Energy.

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7. "Deregulation of Generating Assets and the Disposition of Excess Deferred Federal Income Taxes." (2004). With K.E. Hughes II. *International Energy Law and Taxation Review.* 10 (October): 206-212.
8. "Reflections on the U.S. Electric Power Production Industry: Precedent Decisions Vs. Market Pressures." (2003). With Robert F. Cope III and John W. Yeargain. *Journal of Legal, Ethical, and Regulatory Issues.* Volume 6, Number 1.
9. "A is for Access: A Definitional Tour Through Today's Energy Vocabulary." (2001) *Public Resources Law Digest.* 38: 2.
10. "A Comment on the Integration of Price Cap and Yardstick Competition Schemes in Electrical Distribution Regulation." (2001). With Steven A. Ostrover. *IEEE Transactions on Power Systems.* 16 (4): 940 -942.
11. "Modeling Regional Power Markets and Market Power." (2001). With Robert F. Cope. *Managerial and Decision Economics.* 22:411-429.
12. "A Data Envelopment Analysis of Levels and Sources of Coal Fired Electric Power Generation Inefficiency" (2000). With Williams O. Olatubi. *Utilities Policy.* 9 (2): 47-59.
13. "Cogeneration and Electric Power Industry Restructuring" (1999). With Andrew N. Kleit. *Resource and Energy Economics.* 21:153-166.
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15. "Oil Spills, Workplace Safety, and Firm Size: Evidence from the U.S. Gulf of Mexico OCS." (1997). With O. O. Iledare, A. G. Pulsipher, and Dmitry Mesyanzhinov. *Energy Journal* 4: 73-90.
16. "A Comment on Cost Savings from Nuclear Regulatory Reform" (1997). *Southern Economic Journal*. 63:1108-1112.
17. "The Demand for Long Distance Telephone Communication: A Route-Specific Analysis of Short-Haul Service." (1996). *Studies in Economics and Finance* 17:33-45.

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1. "Hydraulic Fracturing: A Look at Efficiency and the Environmental Effects of Fracking" (2014). With Emily C. Jackson. *Environmental Science and Technology: Proceedings from the 7th International Conference on Environmental Science and Technology*. Volume 1 of 2: edited by George A. Sorial and Jihua Hong. (Houston, TX: American Science Press, ISBN: 978-0976885368): 42-46.
2. "Economic and Policy Issues in Sustaining an Adequate Oil Spill Contingency Fund in the Aftermath of a Catastrophic Incident." (2014). With Stephen R. Barnes and Gregory B. Upton. *Proceedings of the Thirty-seventh AMOP Technical Seminar on Environmental Contamination and Response*. June: 506-524.
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5. "Applications for Distributed Energy Resources in Oil and Gas Production: Methods for Reducing Flare Gas Emissions and Increasing Generation Availability" (2000). With Ritchie D. Priddy. *Proceedings of the International Energy Foundation – ENERGEX 2000*. July.
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3. "Competitive Bidding in the Electric Power Industry." (2003). *Proceedings of the Association of Energy Engineers*. December 2003.
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26. "Standardizing Wholesale Markets For Energy." (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 51: 207-225.
27. "Do Economic Activities Create Different Economic Impacts to Communities Surrounding the Gulf OCS?" (2002). With Williams O. Olatubi. *IAEE Newsletter*. Second Quarter: 16-20.
28. "Will Electric Restructuring Ever Get Back on Track? Texas is not California." (2002). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 50: 943-960.
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30. "The EPA v. The TVA, et. al. Over New Source Review." (2001) With K.E. Hughes, II. *Oil, Gas and Energy Quarterly*. 50:531-543.
31. "Energy Policy by Crisis: Proposed Federal Changes for the Electric Power Industry." (2001). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 50:235-249.
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33. "California Dreaming: Are Competitive Markets Achievable?" (2001). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 49: 743-759.
34. "Distributed Energy Must Be Watched As Opportunity for Gas Companies." (2001). With Martin Collette, and Ritchie D. Priddy. *Natural Gas Journal*. January: 9-16.
35. "Clean Air, Kyoto, and the Boy Who Cried Wolf." (2000). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. December: 529-540.
36. "Energy Conservation Programs and Electric Restructuring: Is There a Conflict?" (2000). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. September: 211-224.

37. "The Post-Restructuring Consolidation of Nuclear-Power Generation in the Electric Power Industry." (2000) With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 49: 751-765.
38. "Issues and Opportunities for Small Scale Electricity Production in the Oil Patch." (2000). With Ritchie D. Priddy. *American Oil and Gas Reporter*. 49: 78-82.
39. "Distributed Energy Resources: The Next Paradigm Shift in the Electric Power Industry." (2000). With K.E. Hughes II. *Oil, Gas and Energy Quarterly*. 48:593-602.
40. "Coming to a Neighborhood Near You: The Merchant Electric Power Plant." (1999). With K.E. Hughes II. *Oil, Gas, and Energy Quarterly*. 48:433-441.
41. "Slow as Molasses: The Political Economy of Electric Restructuring in the South." (1999). With K.E. Hughes II. *Oil, Gas, and Energy Quarterly*. 48: 163-183.
42. "Stranded Investment and Non-Utility Generation." (1999). With Michael T. Maloney. *Electricity Journal* 12: 50-61.
43. "Reliability or Profit? Why Entergy Quit the Southwest Power Pool." (1998). With Fred I. Denny. *Public Utilities Fortnightly*. February 1: 30-33.
44. "Electric Utility Mergers and Acquisitions: A Regulator's Guide." (1996). With Kimberly H. Dismukes. *Public Utilities Fortnightly*. January 1.

PUBLICATIONS: OPINION AND EDITORIAL ARTICLES

1. "Don't Kill Hydraulic Fracturing: It's the Golden Goose." (2014). *Mobile Press Register*. May 22. Also carried by Alabama Media Group and the following newspapers: *Birmingham News*, *Huntsville Times*, and *Birmingham Magazine*.
2. "The Least Effective Way to Invest in Green Energy." (2014). *Wall Street Journal*. Journal Reports: Energy. New York: Dow Jones & Company, October 2.
3. "Stop Picking Winners and Losers." (2013). *Wall Street Journal*. Journal Reports: Energy. New York: Dow Jones & Company, June 18.

PUBLICATIONS: REPORTS AND OTHER MANUSCRIPTS

1. *Beyond the Energy Roadmap: Starting Mississippi's Energy-Based Economic Development Venture*. (2014). Report prepared on behalf of the Mississippi Energy Institute, 310 pp.
2. *Onshore Oil and Gas Infrastructure to Support Development in the Mid-Atlantic OCS Region*. (2014). U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2014-657. 360 pp.
3. *Unconventional Resources and Louisiana's Manufacturing Development Renaissance* (2013). Baton Rouge, LA: LSU Center for Energy Studies, 93 pp.
4. *Removing Big Wind's "Training Wheels:" The Case for Ending the Production Tax Credit* (2012). Washington, DC: American Energy Alliance, 19 pp.
5. *The Impact of Legacy Lawsuits on Conventional Oil and Gas Drilling in Louisiana*. (2012). Baton Rouge, LA: LSU Center for Energy Studies, 62 pp.

6. *Diversifying Energy Industry Risk in the GOM: Post-2004 Changes in Offshore Oil and Gas Insurance Markets.* (2011) With Christopher P. Peters. U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico Region, New Orleans, LA. OCS Study BOEM 2011-054. 95pp.
7. *OCS-Related Infrastructure Fact Book. Volume I: Post-Hurricane Impact Assessment.* (2011). U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico Region, New Orleans, LA. OCS Study BOEM 2011-043. 372 pp.
8. *Fact Book: Offshore Oil and Gas Industry Support Sectors.* (2010). U.S. Department of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico Region, New Orleans, LA. OCS Study BOEM 2010-042. 138pp.
9. *The Impacts of Greenhouse Gas Regulation on the Louisiana Economy.* (2011). With Michael D. McDaniel, Christopher Peters, Kathryn R. Perry, and Lauren L. Stuart. Louisiana Greenhouse Gas Inventory Project, Task 3 and 4 Report. Prepared for the Louisiana Department of Economic Development. Baton Rouge, LA: LSU Center for Energy Studies, 134 pp.
10. *Overview of States' Climate Action and/or Alternative Energy Policy Measures.* (2010). With Michael D. McDaniel, Christopher Peters, Kathryn R. Perry, and Lauren L. Stuart. Louisiana Greenhouse Gas Inventory Project, Task 2 Report. Prepared for the Louisiana Department of Economic Development. Baton Rouge, LA: LSU Center for Energy Studies, 30 pp.
11. *Louisiana Greenhouse Gas Inventory.* (2010). With Michael D. McDaniel, Christopher Peters, Kathryn R. Perry, Lauren L. Stuart, and Jordan L. Gilmore. Louisiana Greenhouse Gas Inventory Project, Task 1 Report. Prepared for the Louisiana Department of Economic Development. Baton Rouge, LA: LSU Center for Energy Studies, 114 pp.
12. *Opportunities for Geo-pressured Thermal Energy in Southwestern Louisiana.* (2010). Report prepared on behalf of Louisiana Geothermal, L.L.C, 41 pp.
13. *Economic and Energy Market Benefits of the Proposed Cavern Expansions at the Jefferson Island Storage and Hub Facility.* (2009). Report prepared on behalf of Jefferson Island Storage and Hub, LLC, 28 pp.
14. *The Benefits of Continued and Expanded Investments in the Port of Venice.* (2009). With Christopher Peters and Kathryn Perry. Baton Rouge, LA: LSU Center for Energy Studies. 83 pp.
15. *Examination of the Development of Liquefied Natural Gas on the Gulf of Mexico.* (2008). U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA OCS Study MMS 2008-017. 106 pp.
16. *Gulf of Mexico OCS Oil and Gas Scenario Examination: Onshore Waste Disposal.* (2007). With Michelle Barnett, Derek Vitrano, and Kristen Strellec. OCS Report, MMS 2007-051. New Orleans, LA: U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico Region.
17. *Economic Impact Analysis of the Proposed Lake Charles Gasification Project.* (2007). Report Prepared on Behalf of Leucadia Corporation.
18. *The Economic Impacts of New Jersey's Proposed Renewable Portfolio Standard.*

- (2005) Report Prepared on Behalf of the New Jersey Division of Ratepayer Advocate.
19. *The Importance of Energy Production and Infrastructure in Plaquemines Parish.* (2006). Report Prepared on Behalf of Project Rebuild Plaquemines.
 20. *Louisiana's Oil and Gas Industry: A Study of the Recent Deterioration in-State Drilling Activity.* (2005). With Kristi A.R. Darby, Jeffrey M. Burke, and Robert H. Baumann. Baton Rouge, LA: Louisiana Department of Natural Resources.
 21. *Comparison of Methods for Estimating the NO_x Emission Impacts of Energy Efficiency and Renewable Energy Projects Shreveport, Louisiana Case Study.* (2005). With Adam Chambers, David Kline, Laura Vimmerstedt, Art Diem, and Dmitry Mesyanzhinov. Golden, Colorado: National Renewable Energy Laboratory.
 22. *Economic Opportunities for a Limited Industrial Retail Choice Plan in Louisiana.* (2004). With Elizabeth A. Downer and Dmitry V. Mesyanzhinov. Baton Rouge, LA: Louisiana State University Center for Energy Studies.
 23. *Economic Opportunities for LNG Development in Louisiana.* (2004). With Elizabeth A. Downer and Dmitry V. Mesyanzhinov. Baton Rouge, LA: Louisiana Department of Economic Development and Greater New Orleans, Inc.
 24. *Marginal Oil and Gas Production in Louisiana: An Empirical Examination of State Activities and Policy Mechanisms for Stimulating Additional Production.* (2004). With Dmitry V. Mesyanzhinov, Jeffrey M. Burke, Robert H. Baumann. Baton Rouge, LA: Louisiana Department of Natural Resources, Office of Mineral Resources.
 25. *Deepwater Program: OCS-Related Infrastructure in the Gulf of Mexico Fact Book.* (2004). With Louis Berger Associates, University of New Orleans National Ports and Waterways Institute, and Research and Planning Associates. MMS Study No. 1435-01-99-CT-30955. U.S. Department of the Interior, Minerals Management Service.
 26. *The Power of Generation: The Ongoing Benefits of Independent Power Development in Louisiana.* With Dmitry V. Mesyanzhinov, Jeffrey M. Burke, and Elizabeth A. Downer. Baton Rouge, LA: LSU Center for Energy Studies, 2003.
 27. *Modeling the Economic Impact of Offshore Oil and Gas Activities in the Gulf of Mexico: Methods and Application.* (2003). With Williams O. Olatubi, Dmitry V. Mesyanzhinov, and Allan G. Pulsipher. Prepared by the Center for Energy Studies, Louisiana State University, Baton Rouge, LA. OCS Study MMS2000-0XX. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA.
 28. *An Analysis of the Economic Impacts Associated with Oil and Gas Activities on State Leases.* (2002) With Robert H. Baumann, Dmitry V. Mesyanzhinov, and Allan G. Pulsipher. Baton Rouge, LA: Louisiana Department of Natural Resources, Office of Mineral Resources.
 29. *Alaska In-State Natural Gas Demand Study.* (2002). With Dmitry Mesyanzhinov, et.al. Anchorage, Alaska: Alaska Department of Natural Resources, Division of Oil and Gas.
 30. *Moving to the Front of the Lines: The Economic Impacts of Independent Power Plant Development in Louisiana.* (2001). With Dmitry Mesyanzhinov and Williams O. Olatubi. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.
 31. *The Economic Impacts of Merchant Power Plant Development in Mississippi.* (2001). Report Prepared on Behalf of the US Oil and Gas Association, Alabama and Mississippi

Division. Houston, TX: Econ One Research, Inc.

32. *Energy Conservation and Electric Restructuring In Louisiana.* (2000). With Dmitry Mesyanzhinov, Ritchie D. Priddy, Robert F. Cope III, and Vera Tabakova. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.
33. *Assessing the Environmental and Safety Risks of the Expanded Role of Independents in Oil and Gas E&P Operations on the U.S. Gulf of Mexico OCS.* (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.
34. *Restructuring the Electric Utility Industry: Implications for Louisiana.* (1996). With Allan Pulsipher and Kimberly H. Dismukes. Baton Rouge, LA: Louisiana State University, Center for Energy Studies.

GRANT RESEARCH

1. *Co-Principal Investigator.* “Expanding Ecosystem Service Provisioning from Coastal Restoration to Minimize Environmental and Energy Constraints” (2015). With John Day and Chris D’Elia. Gulf Research Program. Total Project: \$147,937. Status: In Progress.
2. *Principal Investigator.* “Coastal Marine Institute Administrative Grant” (2104). U.S. Department of the Interior. Total Project \$45,000. Status: In Progress.
3. *Principal Investigator.* “Analysis of the Potential for Combined Heat and Power (CHP) in Louisiana.” (2013). Louisiana Department of Natural Resources. Total Project: \$90,000. Status: Completed.
4. *Co-Principal Investigator.* “CNH: A Tale of Two Louisianas: Coupled Natural-Human Dynamics in a Vulnerable Coastal System” (2013) With Nina Lam, Margaret Reams, Kam-Biu Liu, Victor Rivera, and Kelley Pace. National Science Foundation. Total Project: \$1.5 million. Status: In Progress (Sept 2012-Feb 2017).
5. *Principal Investigator.* “Examination of Unconventional Natural Gas and Industrial Economic Development” (2012). America’s Natural Gas Alliance. Total Project: \$48,210. Status: Completed.
6. *Principal Investigator.* “Investigation of the Potential Economic Impacts Associated with Shell’s Proposed Gas-To-Liquids Project” (2012). Shell Oil Company, North America. Total Project: \$76,708. Status: Completed.
7. *Principal Investigator.* “Analysis of the Federal Wind Energy Production Tax Credit.” American Energy Alliance. Total Project: \$20,000. Status: Completed.
8. *Principal Investigator.* “Energy Sector Impacts Associated with the Deepwater Horizon Oil Spill.” Louisiana Department of Economic Development. Total Project: approximately \$50,000. Status: Completed.
9. *Principal Investigator.* “Economic Contributions and Benefits Support by the Port of Venice.” Port of Venice Coalition. Total Project: \$20,000. Status: Completed.
10. *Principal Investigator.* “Energy Policy Development in Louisiana.” Louisiana Department of Natural Resources. Total Project: \$150,000. Status: Completed.
11. *Principal Investigator.* “Preparing Louisiana for the Possible Federal Regulation of

- Greenhouse Gas Regulation.” With Michael D. McDaniel. Louisiana Department of Economic Development. Total Project: \$98,543. Status: Completed.
12. *Principal Investigator.* “OCS Studies Review: Louisiana and Texas Oil and Gas Activity and Production Forecast; Pipeline Position Paper; and Geographical Units for Observing and Modeling Socioeconomic Impact of Offshore Activity.” (2008). With Mark J. Kaiser and Allan G. Pulsipher. U.S. Department of the Interior, Minerals Management Service. Total Project: \$377,917 (3 years). Status: Completed.
 13. *Principal Investigator.* “State and Local Level Fiscal Effects of the Offshore Petroleum Industry.” (2007). With Loren C. Scott. U.S. Department of the Interior, Minerals Management Service. Total Project: \$241,216 (2.5 years). Status: Completed.
 14. *Principal Investigator.* “Understanding Current and Projected Gulf OCS Labor and Ports Needs.” (2007). With Allan. G. Pulsipher, Kristi A. R. Darby. U.S. Department of the Interior, Minerals Management Service. Total Project: \$169,906. (one year). Status: Completed.
 15. *Principal Investigator.* “Structural Shifts and Concentration of Regional Economic Activity Supporting GOM Offshore Oil and Gas Activities.” (2007). With Allan. G. Pulsipher, Michelle Barnett. U.S. Department of the Interior, Minerals Management Service. Total Project: \$78,374 (one year). Status: Awarded, In Progress.
 16. *Principal Investigator.* “Plaquemine Parish’s Role in Supporting Critical Energy Infrastructure and Production.” (2006). With Seth Cureington. Plaquemines Parish Government, Office of the Parish President and Plaquemines Association of Business and Industry. Total Project: \$18,267. Status: Completed.
 17. *Principal Investigator.* “Diversifying Energy Industry Risk in the Gulf of Mexico.” (2006). With Kristi A. R. Darby. U.S. Department of the Interior, Minerals Management Service. Total Project: \$65,302 (two years). Status: Awarded, In Progress.
 18. *Principal Investigator.* “Post-Hurricane Assessment of OCS-Related Infrastructure and Communities in the Gulf of Mexico Region.” (2006). U.S. Department of the Interior, Minerals Management Service. Total Project Funding: \$244,837. Status: In Progress.
 19. *Principal Investigator.* “Ultra-Deepwater Road Mapping Process.” (2005). With Kristi A. R. Darby, Subcontract with the Texas A&M University, Department of Petroleum Engineering. Funded by the Gas Technology Institute. Total Project Funding: \$15,000. Status: Completed.
 20. *Principal Investigator.* “An Examination of the Opportunities for Drilling Incentives on State Leases.” (2004). With Robert H. Baumann and Kristi A. R. Darby. Louisiana Office of Mineral Resources. Total Project Funding: \$75,000. Status: Completed.
 21. *Principal Investigator.* “ An Examination on the Development of Liquefied Natural Gas Facilities on the Gulf of Mexico.” (2004). With Dmitry V. Mesyanzhinov and Mark J. Kaiser. U.S. Department of the Interior, Minerals Management Service. Total Project Funding \$101,054. Status: Completed.
 22. *Principal Investigator.* “Examination of the Economic Impacts Associated with Large Customer, Industrial Retail Choice.” (2004). With Dmitry V. Mesyanzhinov. Louisiana Mid-Continent Oil and Gas Association. Total Project Funding: \$37,000. Status: Completed.

23. *Principal Investigator*. “Economic Opportunities from LNG Development in Louisiana.” (2003). With Dmitry V. Mesyanzhinov. Metrovision/New Orleans Chamber of Commerce and the Louisiana Department of Economic Development. Total Project Funding: \$25,000. Status: Completed.
24. *Principal Investigator*. “Marginal Oil and Gas Properties on State Leases in Louisiana: An Empirical Examination and Policy Mechanisms for Stimulating Additional Production.” (2002). With Robert H. Baumann and Dmitry V. Mesyanzhinov. Louisiana Office of Mineral Resources. Total Project Funding: \$72,000. Status: Completed.
25. *Principal Investigator*. “A Collaborative Investigation of Baseline and Scenario Information for Environmental Impact Statements.” (2002). With Dmitry V. Mesyanzhinov and Williams O. Olatubi. U.S. Department of Interior, Minerals Management Service. Total Project Funding: \$557,744. Status: Awarded, In Progress.
26. *Co-Principal Investigator*. “An Analysis of the Economic Impacts of Drilling and Production Activities on State Leases.” (2002). With Robert H. Baumann, Allan G. Pulsipher, and Dmitry V. Mesyanzhinov. Louisiana Office of Mineral Resources. Total Project Funding: \$8,000. Status: Completed.
27. *Principal Investigator*. “Cost Profiles and Cost Functions for Gulf of Mexico Oil and Gas Development Phases for Input Output Modeling.” (1998). With Dmitry Mesyanzhinov and Allan G. Pulsipher. U.S. Department of Interior, Minerals Management Service. Total Project Funding: \$244,956. Status: Completed.
28. *Principal Investigator*. “An Economic Impact Analysis of OCS Activities on Coastal Louisiana.” (1998). With Dmitry Mesyanzhinov and David Hughes. U.S. Department of Interior, Minerals Management Service. Total Project Funding: \$190,166. Status: Completed.
29. *Principal Investigator*. “Energy Conservation and Electric Restructuring in Louisiana.” (1997). Louisiana Department of Natural Resources.” Petroleum Violation Escrow Program Funds. Total Project Funding: \$43,169. Status: Completed.
30. *Principal Investigator*. “The Industrial Supply of Electricity: Commercial Generation, Self-Generation, and Industry Restructuring.” (1996). With Andrew Kleit. Louisiana Energy Enhancement Program, LSU Office of Research and Development. Total Project Funding: \$19,948. Status: Completed.
31. *Co-Principal Investigator*. “Assessing the Environmental and Safety Risks of the Expanded Role of Independents in Oil and Gas E&P Operations on the U.S. Gulf of Mexico OCS.” (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, Grant Number 95-0056. Total Project Funding: \$109,361. Status: Completed.

ACADEMIC CONFERENCE PAPERS/PRESENTATIONS

1. “The Impact of Infrastructure Cost Recovery Mechanisms on Pipeline Replacements and Leaks” (2015). With Gregory Upton. 38th IAEE International Conference, Antalya, Turkey. May 26.
2. “Modifying Renewables Policies to Sustain Positive Economic and Environmental Change” (2015). IEEE Annual Green Technologies (“Greentech”) Conference. April 17.

3. "The Gulf Coast Industrial Investment Renaissance and New CHP Development Opportunities." (2014). Industrial Energy and Technology Conference, New Orleans, Louisiana. May 20.
4. "Estimating Critical Energy Infrastructure Value at Risk from Coastal Erosion" (2014). With Siddhartha Narra. American's Estuaries: 7th Annual Summit on Coastal and Estuarine Habitat Restoration. Washington, D.C., November 3-6.
5. "Economies of Scale, Learning Curves, and Offshore Wind Development Costs" (2012). With Gregory Upton. Southern Economic Association Annual Conference, New Orleans, LA November 17.
6. "Analysis of Risk and Post-Hurricane Reaction." (2009). 25th Annual Information Transfer Meeting. U.S. Department of the Interior, Minerals Management Service. January 7.
7. "Legacy Litigation, Regulation, and Other Determinants of Interstate Drilling Activity Differentials." (2008). With Christopher Peters and Mark Kaiser. 28th Annual USAEE/IAEE North American Conference: Unveiling the Future of Future of Energy Frontiers. New Orleans, LA, December 3.
8. "Gulf Coast Energy Infrastructure Renaissance: Overview." (2008). 28th Annual USAEE/IAEE North American Conference: Unveiling the Future of Future of Energy Frontiers. New Orleans, LA, December 3.
9. "Understanding the Impacts of Katrina and Rita on Energy Industry Infrastructure." (2008). American Chemical Society National Meetings, New Orleans, Louisiana. April 7.
10. "Determining the Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure." (2007). With Kristi A. R. Darby and Michelle Barnett. International Association for Energy Economics, Wellington, New Zealand, February 19.
11. "Regulatory Issues in Rate Design, Incentives, and Energy Efficiency." (2007). 34th Annual Public Utilities Research Center Conference, University of Florida. Gainesville, FL. February 16.
12. "An Examination of LNG Development on the Gulf of Mexico." (2007). With Kristi A.R. Darby. US Department of the Interior, Minerals Management Service. 24th Annual Information Technology Meeting. New Orleans, LA. January 9.
13. "OCS-Related Infrastructure on the GOM: Update and Summary of Impacts." (2007). US Department of the Interior, Minerals Management Service. 24th Annual Information Technology Meeting. New Orleans, LA. January 10.
14. "The Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure." (2006). With Michelle Barnett. Third National Conference on Coastal and Estuarine Habitat Restoration. Restore America's Estuaries. New Orleans, Louisiana, December 11.
15. "The Impact of Implementing a 20 Percent Renewable Portfolio Standard in New Jersey." (2006). With Seth E. Cureington. Mid-Continent Regional Science Association 37th Annual Conference, Purdue University, Lafayette, Indiana, June 9.

16. "The Impacts of Hurricane Katrina and Rita on Energy infrastructure Along the Gulf Coast." (2006). Environment Canada: 2006 Arctic and Marine Oilspill Program. Vancouver, British Columbia, Canada.
17. "Hurricanes, Energy Markets, and Energy Infrastructure in the Gulf of Mexico: Experiences and Lessons Learned." (2006). With Kristi A.R. Darby and Seth E. Cureington. 29th Annual IAEE International Conference, Potsdam, Germany, June 9.
18. "An Examination of the Opportunities for Drilling Incentives on State Leases in Louisiana." (2005). With Kristi A.R. Darby. 28th Annual IAEE International Conference, Taipei, Taiwan (June).
19. "Fiscal Mechanisms for Stimulating Oil and Gas Production on Marginal Leases." (2004). With Jeffrey M. Burke. International Association of Energy Economics Annual Conference, Washington, D.C. (July).
20. "GIS and Applied Economic Analysis: The Case of Alaska Residential Natural Gas Demand." (2003). With Dmitry V. Mesyanzhinov. Presented at the Joint Meeting of the East Lakes and West Lakes Divisions of the Association of American Geographers in Kalamazoo, MI, October 16-18.
21. "Are There Any In-State Uses for Alaska Natural Gas?" (2002). With Dmitry V. Mesyanzhinov and William E. Nebesky. IAEE/USAEE 22nd Annual North American Conference: "Energy Markets in Turmoil: Making Sense of It All." Vancouver, British Columbia, Canada. October 7.
22. "The Economic Impact of State Oil and Gas Leases on Louisiana." (2002). With Dmitry V. Mesyanzhinov. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.
23. "Moving to the Front of the Lines: The Economic Impact of Independent Power Plant Development in Louisiana." (2002). With Dmitry V. Mesyanzhinov and Williams O. Olatubi. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.
24. "New Consistent Approach to Modeling Regional Economic Impacts of Offshore Oil and Gas Activities in the Gulf of Mexico." (2002). With Vicki Zatarain. 2002 National IMPLAN Users' Conference. New Orleans, Louisiana, September 4-6.
25. "Distributed Energy Resources, Energy Efficiency, and Electric Power Industry Restructuring." (1999). American Society of Environmental Science Fourth Annual Conference. Baton Rouge, Louisiana. December.
26. "Estimating Efficiency Opportunities for Coal Fired Electric Power Generation: A DEA Approach." (1999). With Williams O. Olatubi. Southern Economic Association Sixty-ninth Annual Conference. New Orleans, November.
27. "Applied Approaches to Modeling Regional Power Markets." (1999.) With Robert F. Cope. Southern Economic Association Sixty-ninth Annual Conference. New Orleans, November 1999.
28. "Parametric and Non-Parametric Approaches to Measuring Efficiency Potentials in Electric Power Generation." (1999). With Williams O. Olatubi. International Atlantic Economic Society Annual Conference, Montreal, October.

29. "Asymmetric Choice and Customer Benefits: Lessons from the Natural Gas Industry." (1999). With Rachelle F. Cope and Dmitry Mesyanzhinov. International Association of Energy Economics Annual Conference. Orlando, Florida. August.
30. "Modeling Regional Power Markets and Market Power." (1999). With Robert F. Cope. Western Economic Association Annual Conference. San Diego, California. July.
31. "Economic Impact of Offshore Oil and Gas Activities on Coastal Louisiana" (1999). With Dmitry Mesyanzhinov. Annual Meeting of the Association of American Geographers. Honolulu, Hawaii. March.
32. "Empirical Issues in Electric Power Transmission and Distribution Cost Modeling." (1998). With Robert F. Cope and Dmitry Mesyanzhinov. Southern Economic Association. Sixty-Eighth Annual Conference. Baltimore, Maryland. November.
33. "Modeling Electric Power Markets in a Restructured Environment." (1998). With Robert F. Cope and Dan Rinks. International Association for Energy Economics Annual Conference. Albuquerque, New Mexico. October.
34. "Benchmarking Electric Utility Distribution Performance." (1998) With Robert F. Cope and Dmitry Mesyanzhinov. Western Economic Association, Seventy-sixth Annual Conference. Lake Tahoe, Nevada. June.
35. "Power System Operations, Control, and Environmental Protection in a Restructured Electric Power Industry." (1998). With Fred I. Denny. IEEE Large Engineering Systems Conference on Power Engineering. Nova Scotia, Canada. June.
36. "Benchmarking Electric Utility Transmission Performance." (1997). With Robert F. Cope and Dmitry Mesyanzhinov. Southern Economic Association, Sixty-seventh Annual Conference. Atlanta, Georgia. November 21-24.
37. "A Non-Linear Programming Model to Estimate Stranded Generation Investments in a Deregulated Electric Utility Industry." (1997). With Robert F. Cope and Dan Rinks. Institute for Operations Research and Management Science Annual Conference. Dallas Texas. October 26-29.
38. "New Paradigms for Power Engineering Education." (1997). With Fred I. Denny. International Association of Science and Technology for Development, High Technology in the Power Industry Conference. Orlando, Florida. October 27-30
39. "Cogeneration and Electric Power Industry Restructuring." (1997). With Andrew N. Kleit. Western Economic Association, Seventy-fifth Annual Conference. Seattle, Washington. July 9-13.
40. "The Unintended Consequences of the Public Utilities Regulatory Policies Act of 1978." (1997). National Policy History Conference on the Unintended Consequences of Policy Decisions. Bowling Green State University. Bowling Green, Ohio. June 5-7.
41. "Assessing Environmental and Safety Risks of the Expanding Role of Independents in E&P Operations on the Gulf of Mexico OCS." (1996). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, 16th Annual Information Transfer Meeting. New Orleans, Louisiana.
42. "Empirical Modeling of the Risk of a Petroleum Spill During E&P Operations: A Case Study of the Gulf of Mexico OCS." (1996). With Omowumi Iledare, Allan Pulsipher, and

- Dmitry Mesyanzhinov. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.
43. "Input Price Fluctuations, Total Factor Productivity, and Price Cap Regulation in the Telecommunications Industry" (1996). With Farhad Niami. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.
 44. "Recovery of Stranded Investments: Comparing the Electric Utility Industry to Other Recently Deregulated Industries" (1996). With Farhad Niami and Dmitry Mesyanzhinov. Southern Economic Association, Sixty-Sixth Annual Conference. Washington, D.C.
 45. "Spatial Perspectives on the Forthcoming Deregulation of the U.S. Electric Utility Industry." (1996) With Dmitry Mesyanzhinov. Southwest Association of American Geographers Annual Meeting. Norman, Oklahoma.
 46. "Comparing the Safety and Environmental Performance of Offshore Oil and Gas Operators." (1995). With Allan Pulsipher, Omowumi Iledare, Dmitry Mesyanzhinov, William Daniel, and Bob Baumann. U.S. Department of Interior, Minerals Management Service, 15th Annual Information Transfer Meeting. New Orleans, Louisiana.
 47. "Empirical Determinants of Nuclear Power Plant Disallowances." (1995). Southern Economic Association, Sixty-Fifth Annual Conference. New Orleans, Louisiana.
 48. "A Cross-Sectional Model of IntraLATA MTS Demand." (1995). Southern Economic Association, Sixty-Fifth Annual Conference. New Orleans, Louisiana.

ACADEMIC SEMINARS AND PRESENTATIONS

1. "Air Emissions Regulation and Policy: The Recently Proposed Cross State Air Pollution Rule and the Implications for Louisiana Power Generation." Lecture before School of the Coast & Environment. November 5, 2011.
2. "Energy Regulation: Overview of Power and Gas Regulation." Lecture before School of the Coast & Environment, Course in Energy Policy and Law. October 5, 2009.
3. "Trends and Issues in Renewable Energy." Presentation before the School of the Coast & Environment, Louisiana State University. Spring Guest Lecture Series. May 4, 2007.
4. "CES Research Projects and Status." Presentation before the U.S. Department of the Interior, Minerals Management Service, Outer Continental Shelf Scientific Committee Meeting, New Orleans, LA May 22, 2007.
5. "Hurricane Impacts on Energy Production and Infrastructure." Presentation Before the 53rd Mineral Law Institute, Louisiana State University. April 7, 2006.
6. "Trends and Issues in the Natural Gas Industry and the Development of LNG: Implications for Louisiana. (2004) 51st Mineral Law Institute, Louisiana State University, Baton Rouge, LA. April 2, 2004.
7. "Electric Restructuring and Conservation." (2001). Presentation before the Department of Electrical Engineering, McNeese State University. Lake Charles, Louisiana. May 2, 2001.
8. "Electric Restructuring and the Environment." (1998). Environment 98: Science, Law, and Public Policy. Tulane University. Tulane Environmental Law Clinic. March 7, New Orleans, Louisiana.

9. "Electric Restructuring and Nuclear Power." (1997). Louisiana State University. Department of Nuclear Science. November 7, Baton Rouge, Louisiana.
10. "The Empirical Determinants of Co-generated Electricity: Implications for Electric Power Industry Restructuring." (1997). With Andrew N. Kleit. Florida State University. Department of Economics: Applied Microeconomics Workshop Series. October 17, Tallahassee, Florida.

PROFESSIONAL AND CIVIC PRESENTATIONS

1. "Gulf Coast Industrial Growth: Passing clouds or storms on the horizon?" (2016). Gulf Coast Power Association Meetings. New Orleans, LA, February 18.
2. "The Transition to Crisis: What do the recent changes in energy markets mean for Louisiana?" (2016). Louisiana Independent Study Group. February 2.
3. "Regulatory and Ratepayer Issues in the Analysis of Utility Natural Gas Reserves Purchases" (2016). National Association of State Utility Consumer Advocates Gas Consumer Monthly Meeting. January 25.
4. "The Impact of Infrastructure Cost Recovery Mechanisms on Pipeline Replacements and Leaks." (2015). Southern Economic Association Meeting 2015. November 23.
5. "Emerging Issues in Fuel Procurement: Opportunities & Challenges in Natural Gas Reserves Investment." (2015). National Association of State Utility Consumer Advocates Annual Meeting. Austin, Texas. November 9.
6. "Trends and Issues in Net Metering and Solar Generation." (2015). Louisiana Rural Electric Cooperative Meeting. November 5.
7. "Electric Power: Industry Overview, Organization, and Federal/State Distinctions." (2015). EUCI. October 16.
8. "Natural Gas 101: The Basics of Natural Gas Production, Transportation, and Markets." (2015). Council of State Governments Special Meeting on Gas Markets. New Orleans, LA. October 14.
9. "Update and General Business Matters." (2015). CES Industry Associates Meeting. Baton Rouge, Louisiana. Fall 2015.
10. "The Impact of Infrastructure Cost Recovery Mechanisms on Pipeline Replacements and Leaks." (2015). 38th IAEE 2015 International Conference. Antalya, Turkey. May 26.
11. "Industry on the Move – What's Next?" (2015). Event Sponsored by Regional Bank and 1012 Industry Report. May 5.
12. "The State of the Energy Industry and Other Emerging Issues." (2015). Lex Mundi Energy & Natural Resources Practice Group Global Meeting. May 5.
13. "Energy, Louisiana, and LSU." (2015). LSU Science Café. Baton Rouge, Louisiana. April 28.
14. "Energy Market Changes and Impacts for Louisiana." (2015). Kinetica Partners Shippers Meeting, New Orleans, Louisiana. April 22.
15. "Incentives, Risk and the Changing Nature of Utility Regulation." (2015). NARUC Staff Subcommittee on Accounting and Finance Meetings, New Orleans, Louisiana. April 22.

16. "Modifying Renewables Policies to Sustain Positive and Economic Change." (2015). IEEE Annual Green Technologies ("Greentech Conference"). April 17.
17. "Louisiana's Changing Energy Environment." (2015). John P. Laborde Energy Law Center Advisory Board Spring Meeting, Baton Rouge, Louisiana. March 27.
18. "The Latest and the Long on Energy: Outlooks and Implications for Louisiana." (2015). Iberia Bank Advisory Board Meeting, Baton Rouge, Louisiana. February 23.
19. "A Survey of Recent Energy Market Changes and their Potential Implications for Louisiana." (2015). Vistage Group, New Orleans, Louisiana. February 4.
20. "Energy Prices and the Outlook for the Tuscaloosa Marine Shale." (2015). Baton Rouge Rotary Club, Baton Rouge, Louisiana. January 28.
21. "Trends in Energy & Energy-Related Economic Development." (2014). Miller and Thompson Presentation, Baton Rouge, Louisiana. December 30.
22. "Overview EPA's Proposed Rule Under Section 111(d) of the Clean Air Act: Impacts for Louisiana." (2014). Louisiana State Bar: Utility Section CLE Annual Meeting, Baton Rouge, Louisiana. November 7.
23. "Overview EPA's Proposed Clean Power Plan and Impacts for Louisiana." (2014). Clean Cities Coalition Meeting, Baton Rouge, Louisiana. November 5.
24. "Impacts on Louisiana from EPA's Proposed Clean Power Plan." (2014). Air & Waste Management Annual Environmental Conference (Louisiana Chapter), Baton Rouge, Louisiana. October 29, 2014.
25. "A Look at America's Growing Demand for Natural Gas." (2014). Louisiana Chemical Association Annual Meeting, New Orleans, Louisiana. October 23.
26. "Trends in Energy & Energy-Related Economic Development." (2014). 2014 Government Finance Officer Association Meetings, Baton Rouge, Louisiana. October 9.
27. "The Conventional Wisdom Associated with Unconventional Resource Development." (2014). National Association for Business Economics Annual Conference, Chicago, Illinois. September 28.
28. Unconventional Oil & Natural Gas: Overview of Resources, Economics & Policy Issues. (2014). Society of Environmental Journalists Annual Meeting. New Orleans, Louisiana. September 4.
29. "Natural Gas Leveraged Economic Development in the South." (2014). Southern Governors Association Meeting, Little Rock, Arkansas. August 16.
30. "The Past, Present and Future of CHP Development in Louisiana." (2014). Louisiana Public Service Commission CHP Workshop, Baton Rouge, Louisiana. June 25.
31. "Regional Natural Gas Demand Growth: Industrial and Power Generation Trends." (2014). Kinetica Partners Shippers Meeting, New Orleans, Louisiana. April 30.
32. "The Technical and Economic Potential for CHP in Louisiana and the Impact of the Industrial Investment Renaissance on New CHP Capacity Development." (2014). Electric Power 2014, New Orleans, Louisiana. April 1.
33. "Industry Investments and the Economic Development of Unconventional Development." (2014). Tuscaloosa Marine Shale Conference & Expo, Natchez, Mississippi. March 31.

34. Discussion Panelist. Energy Outlook 2035: The Global Energy Industry and Its Impact on Louisiana, (2014). Grow Louisiana Coalition, Baton Rouge, Louisiana. March 18.
35. "Natural Gas and the Polar Vortex: Has Recent Weather Led to a Structural Change in Natural Gas Markets?" (2014). National Association of State Utility Consumer Advocates Monthly Gas Committee Meeting. February 19.
36. "Some Unconventional Thoughts on Regional Unconventional Gas and Power Generation Requirements." (2014). Gulf Coast Power Association Special Briefing, New Orleans, Louisiana. February 6.
37. "Leveraging Energy for Industrial Development." (2013). 2013 Governor's Energy Summit, Jackson, Mississippi. December 5.
38. "Natural Gas Line Extension Policies: Ratepayer Issues and Considerations." (2013). National Association of State Utility Consumer Advocates Annual Meeting, Orlando, Florida. November 19.
39. "Replacement, Reliability & Resiliency: Infrastructure & Rate-making Issues in the Power & Natural Gas Distribution Industries." (2013). Louisiana State Bar, Public Utility Section Meetings. November 15.
40. "Natural Gas Markets: Leveraging the Production Revolution into an Industrial Renaissance." (2013). International Technical Conference, Houston, TX. October 11.
41. "Natural Gas, Coal & Power Generation Issues and Trends." (2013). Southeast Labor and Management Public Affairs Committee Conference, Chattanooga, Tennessee. September 27.
42. "Recent Trends in Pipeline Replacement Trackers." (2013). National Association of State Utility Consumer Advocates Monthly Gas Committee Meeting. September 19.
43. Discussion Panelist (2013). Think About Energy Summit, America's Natural Gas Alliance, Columbus Ohio. September 16-17.
44. "Future Test Years: Issues to Consider." (2013). National Regulatory Research Institute, Teleseminar on Future Test Years. August 28.
45. "Industrial Development Outlook for Louisiana." (2013). Louisiana Water Synergy Project Meetings, Jones Walker Law Firm, Baton Rouge, Louisiana. July 30.
46. "Natural Gas & Electric Power Coordination Issues and Challenges." (2013). Utilities State Government Organization Conference, Pointe Clear, Alabama. July 9.
47. "Natural Gas Market Issues & Trends." (2013). Western Conference of Public Service Commissioners, Santa Fe, New Mexico. June 3.
48. "Louisiana Unconventional Natural Gas and Industrial Redevelopment." (2013). Louisiana Chemical Association/Louisiana Chemical Industry Alliance Annual Legislative Conference, Baton Rouge, Louisiana. May 8.
49. "Infrastructure Cost Recovery Mechanism: Overview of Issues." (2013). Energy Bar Association Annual Meeting, Washington, D.C. May 1.
50. "GOM Offshore Oil and Gas." (2013). Energy Executive Roundtable, New Orleans, Louisiana. March 27.
51. "Louisiana Unconventional Natural Gas and Industrial Redevelopment." (2013). Risk

- Management Association Luncheon, March 21.
52. "Natural Gas Market Update and Emerging Issues." (2013). NASUCA Gas Committee Conference Call/Webinar, March 12.
 53. "Unconventional Resources and Louisiana's Manufacturing Development Renaissance." (2013). Baton Rouge Press Club, De La Ronde Hall, Baton Rouge, LA, January 28.
 54. "New Industrial Operations Leveraged by Unconventional Natural Gas." (2013) American Petroleum Institute-Louisiana Chapter. Lafayette, LA, Petroleum Club, January 14.
 55. "What's Going on with Energy? How Unconventional Oil and Gas Development is Impacting Renewables, Efficiency, Power Markets, and All that Other Stuff." (2012). Atlanta Economics Club Monthly Meeting. Atlanta, GA. December 11.
 56. "Trends, Issues, and Market Changes for Crude Oil and Natural Gas." (2012). East Iberville Community Advisory Panel Meeting. St. Gabriel, LA. September 26.
 57. "Game Changers in Crude and Natural Gas Markets." (2012). Chevron Community Advisory Panel Meeting. Belle Chase, LA, September 17.
 58. "The Outlook for Renewables in a Changing Power and Natural Gas Market." (2012). Louisiana Biofuels and Bioprocessing Summit. Baton Rouge, LA. September 11.
 59. "The Changing Dynamics of Crude and Natural Gas Markets." (2012). Chalmette Refining Community Advisory Panel Meeting. Chalmette, LA, September 11.
 60. "The Really Big Game Changer: Crude Oil Production from Shale Resources and the Tuscaloosa Marine Shale." (2012). Baton Rouge Chamber of Commerce Board Meeting. Baton Rouge, LA, June 27.
 61. "The Impact of Changing Natural Gas Prices on Renewables and Energy Efficiency." (2012). NASUCA Gas Committee Conference Call/Webinar. 12 June 2012.
 62. "Issues in Gas-Renewables Coordination: How Changes in Natural Gas Markets Potentially Impact Renewable Development" (2012). Energy Bar Association, Louisiana Chapter, Annual Meeting, New Orleans, LA. April 12, 2012.
 63. "Issues in Natural Gas End-Uses: Are We Really Focusing on the Real Opportunities?" (2012). Energy Bar Association, Louisiana Chapter, Annual Meeting, New Orleans, LA. April 12, 2012.
 64. "The Impact of Legacy Lawsuits on Conventional Oil and Gas Drilling in Louisiana." (2012). Louisiana Oil and Gas Association Annual Meeting, Lake Charles, LA. February 27, 2012.
 65. "The Impact of Legacy Lawsuits on Conventional Oil and Gas Drilling in Louisiana." (2012) Louisiana Oil and Gas Association Annual Meeting. Lake Charles, Louisiana. February 27, 2012.
 66. "Louisiana's Unconventional Plays: Economic Opportunities, Policy Challenges. Louisiana Mid-Continent Oil and Gas Association 2012 Annual Meeting. (2012) New Orleans, Louisiana. January 26, 2012.
 67. "EPA's Recently Proposed Cross State Air Pollution Rule ("CSAPR") and Its Impacts on Louisiana." (2011). Bossier Chamber of Commerce. November 18, 2011.

68. "Facilitating the Growth of America's Natural Gas Advantage." (2011). BASF U.S. Shale Gas Workshop Management Meeting. Florham Park, New Jersey. November 1, 2011.
69. "CSAPR and EPA Regulations Impacting Louisiana Power Generation." (2011). Air and Waste Management Association (Louisiana Section) Fall Conference. Environmental Focus 2011: a Multi-Media Forum. Baton Rouge, LA. October 25, 2011.
70. "Natural Gas Trends and Impact on Industrial Development." (2011). Central Gulf Coast Industrial Alliance Conference. Arthur R. Outlaw Convention Center. Mobile, AL. September 22, 2011.
71. "Energy Market Changes and Policy Challenges." (2011). Southeast Manpower Tripartite Alliance ("SEMTA") Summer Conference. Nashville, TN September 2, 2011.
72. "EPA Regulations, Rates & Costs: Implications for U.S. Ratepayers." (2011). Workshop: "A Smarter Approach to Improving Our Environment." 38th Annual American Legislative Exchange Council ("ALEC") Meetings. New Orleans, LA. August 5, 2011.
73. Panelist/Moderator. Workshop: "Why Wait? Start Energy Independence Today." 38th Annual American Legislative Exchange Council ("ALEC") Meetings. New Orleans, LA. August 4, 2011.
74. "Facilitating the Growth of America's Natural Gas Advantage." Texas Chemical Council, Board of Directors Summer Meeting. San Antonio, TX. July 28, 2011.
75. "Creating Ratepayer Benefits by Reconciling Recent Gas Supply Opportunities with Past Policy Initiatives." National Association of State Utility Consumer Advocates ("NASUCA"), Monthly Gas Committee Meeting. July 12, 2011.
76. "Energy Market Trends and Policies: Implications for Louisiana." (2011). Lakeshore Lion's Club Monthly Meeting. Baton Rouge, Louisiana. June 20, 2011.
77. "America's Natural Gas Advantage: Securing Benefits for Ratepayers Through Paradigm Shifts in Policy." Southeastern Association of Regulatory Commissioners ("SEARUC") Annual Meeting. Nashville, Tennessee. June 14, 2011.
78. "Learning Together: Building Utility and Clean Energy Industry Partnerships in the Southeast." (2011). American Solar Energy Society National Solar Conference. Raleigh Convention Center, Raleigh, North Carolina. May 20, 2011.
79. "Louisiana Energy Outlook and Trends." (2011). Executive Briefing. Consul General of Canada. LSU Center for Energy Studies, Baton Rouge, Louisiana. May 24, 2011.
80. "Louisiana's Natural Gas Advantage: Can We Hold It? Grow It? Or Do We Need to be Worrying About Other Problems?" (2011). Louisiana Chemical Association Annual Legislative Conference, Baton Rouge, Louisiana, May 5, 2011.
81. "Energy Outlook and Trends: Implications for Louisiana. (2011). Executive Briefing, Legislative Staff, Congressman William Cassidy. LSU Center for Energy Studies, Baton Rouge, Louisiana. March 25, 2011.
82. "Regulatory Issues in Inflation Adjustment Mechanisms and Allowances." (2011). Gas Committee, National Association of State Utility Consumer Advocates ("NASUCA"). February 15, 2011.
83. "Regulatory Issues in Inflation Adjustment Mechanisms and Allowances." (2010). 2010 Annual Meeting, National Association of State Utility Consumer Advocates ("NASUCA"),

- Omni at CNN Center, Atlanta, Georgia, November 16, 2010.
84. "How Current and Proposed Energy Policy Impacts Consumers and Ratepayers." (2010). 122nd Annual Meeting, National Association of Regulatory Utility Commissioners ("NARUC"), Omni at CNN Center, Atlanta, Georgia, November 15, 2010.
 85. "Energy Outlook: Trends and Policies." (2010). 2010 Tri-State Member Service Conference; Arkansas, Louisiana, and Mississippi Electric Cooperatives. L'Auberge du Lac Casino Resort, Lake Charles, Louisiana, October 14, 2010.
 86. "Deepwater Moratorium and Louisiana Impacts." (2010). The Energy Council Annual Meeting. Gulf of Mexico Deepwater Horizon Accident, Response, and Policy. Beau Rivage Conference Center. Biloxi, Mississippi. September 25, 2010.
 87. "Overview on Offshore Drilling and Production Activities in the Aftermath of Deepwater Horizon." (2010) Jones Walker Banking Symposium. The Oil Spill: What Will it Mean for Banks in the Region? New Orleans, Louisiana. August 31, 2010.
 88. "Long-Term Energy Sector Impacts from the Oil Spill." (2010). Second Annual Louisiana Oil & Gas Symposium. The BP Gulf Oil Spill: Long-Term Impacts and Strategies. Baton Rouge Geological Society. August 16, 2010.
 89. "Overview and Issues Associated with the Deepwater Horizon Accident." (2010). Global Interdependence Meeting on Energy Issues. Baton Rouge, LA. August 12, 2010.
 90. "Overview and Issues Associated with the Deepwater Horizon Accident." (2010). Regional Roundtable Webinar. National Association for Business Economics. August 10, 2010.
 91. "Deepwater Moratorium: Overview of Impacts for Louisiana." Louisiana Association of Business and Industry Meeting. Baton Rouge, LA. June 25, 2010.
 92. Moderator. Senior Executive Roundtable on Industrial Energy Efficiency. U.S. Department of Energy Conference on Industrial Efficiency. Office of Renewable Energy and Energy Efficiency. Royal Sonesta Hotel, New Orleans, LA. May 21, 2010.
 93. "The Energy Outlook: Trends and Policies Impacting Southeastern Natural Gas Supply and Demand Growth." Second Annual Local Economic Analysis and Research Network ("LEARN") Conference. Federal Reserve Bank of Atlanta. March 29, 2010.
 94. "Natural Gas Supply Issues: Gulf Coast Supply Trends and Implications for Louisiana." Energy Bar Association, New Orleans Chapter Meeting. Jones Walker Law Firm. January 28, 2010, New Orleans, LA.
 95. "Potential Impacts of Federal Greenhouse Gas Legislation on Louisiana Industry." LCA Government Affairs Committee Meeting. November 10, 2009. Baton Rouge, LA
 96. "Regulatory and Ratemaking Issues Associated with Cost and Revenue Tracker Mechanisms." National Association of State Utility Consumer Advocates ("NASUCA") Annual Meeting. November 10, 2009.
 97. "Louisiana's Stakes in the Greenhouse Gas Debate." Louisiana Chemical Association and Louisiana Chemical Industry Alliance Annual Meeting: The Billing Dollar Budget Crisis: Catastrophe or Change? New Orleans, LA.
 98. "Gulf Coast Energy Outlook: Issues and Trends." Women's Energy Network, Louisiana Chapter. September 17, 2009. Baton Rouge, LA.

99. "Gulf Coast Energy Outlook: Issues and Trends." Natchez Area Association of Energy Service Companies. September 15, 2009, Natchez, MS.
100. "The Small Picture: The Cost of Climate Change to Louisiana." Louisiana Association of Business and Industry, U.S. Chamber of Commerce, Louisiana Oil and Gas Association, and LSU Center for Energy Studies Conference: Can Louisiana Make a Buck After Climate Change Legislation? August 21, 2009. Baton Rouge, LA.
101. "Carbon Legislation and Clean Energy Markets: Policy and Impacts." National Association of Conservation Districts, South Central Region Meeting. August 14, 2009. Baton Rouge, LA.
102. "Evolving Carbon and Clean Energy Markets." The Carbon Emissions Continuum: From Production to Consumption." Jones Walker Law Firm and LSU Center for Energy Studies Workshop. June 23, 2009. Baton Rouge, LA
103. "Potential Impacts of Cap and Trade on Louisiana Ratepayers: Preliminary Results." (2009). Briefing before the Louisiana Public Service Commission. Business and Executive Meeting, May 12, 2009. Baton Rouge, LA.
104. "Natural Gas Outlook." (2009). Briefing before the Louisiana Public Service Commission. Business and Executive Meeting, May 12, 2009. Baton Rouge, LA.
105. "Gulf Coast Energy Outlook: Issues and Trends." (2009). ISA-Lafayette Technical Conference & Expo. Cajundome Conference Center. Lafayette, Louisiana. March 12, 2009.
106. "The Cost of Energy Independence, Climate Change, and Clean Energy Initiatives on Utility Ratepayers." (2009). National Association of Business Economics (NABE). 25th Annual Washington Economic Policy Conference: Restoring Financial and Economic Stability. Arlington, VA March 2, 2009.
107. Panelist, "Expanding Exploration of the U.S. OCS" (2009). Deep Offshore Technology International Conference and Exhibition. PennWell. New Orleans, Louisiana. February 4, 2009.
108. "Gulf Coast Energy Outlook." (2008.) Atmos Energy Regional Management Meeting. Louisiana and Mississippi Division. New Orleans, Louisiana. October 8, 2008.
109. "Background, Issues, and Trends in Underground Hydrocarbon Storage." (2008). Presentation before the LSU Center for Energy Studies Industry Advisory Board Meeting. Baton Rouge, Louisiana. August 27, 2008.
110. "Greenhouse Gas Regulations and Policy: Implications for Louisiana." (2008). Presentation before the Praxair Customer Seminar. Houston, Texas, August 14, 2008.
111. "Market and Regulatory Issues in Alternative Energy and Louisiana Initiatives." (2008). Presentation before the 2008 Statewide Clean Cities Coalition Conference: Making Sense of Alternative Fuels and Advanced Technologies. New Orleans, Louisiana, March 27, 2008.
112. "Regulatory Issues in Rate Design, Incentives, and Energy Efficiency." (2007) Presentation before the New Hampshire Public Utilities Commission. Workshop on Energy Efficiency and Revenue Decoupling. November 7, 2007.
113. "Regulatory Issues for Consumer Advocates in Rate Design, Incentives, and Energy

- Efficiency.” (2007). National Association of State Utility Consumer Advocates, Mid-Year Meeting. June 12, 2007.
114. “Regulatory and Policy Issues in Nuclear Power Plant Development.” (2007). LSU Center for Energy Studies Industry Advisory Council Meeting. Baton Rouge, LA. March 23, 2007.
 115. “Oil and Gas in the Gulf of Mexico: A North American Perspective.” (2007). Canadian Consulate, Heads of Mission EnerNet Workshop, Houston, Texas. March 20, 2007.
 116. “Regulatory Issues for Consumer Advocates in Rate Design, Incentives & Energy Efficiency.” (2007). National Association of State Utility Consumer Advocates (“NASUCA”) Gas Committee Monthly Meeting. February 13, 2006.
 117. “Recent Trends in Natural Gas Markets.” (2006). National Association of Regulatory Utility Commissioners, 118th Annual Convention. Miami, FL November 14, 2006.
 118. “Energy Markets: Recent Trends, Issues & Outlook.” (2006). Association of Energy Service Companies (AESC) Meeting. Petroleum Club, Lafayette, LA, November 8, 2006.
 119. “Energy Outlook” (2006). National Business Economics Issues Council. Quarterly Meeting, Nashville, TN, November 1-2, 2006.
 120. “Global and U.S. Energy Outlook.” (2006). Energy Virginia Conference. Virginia Military Institute, Lexington, VA October 17, 2006.
 121. “Interdependence of Critical Energy Infrastructure Systems.” (2006). Cross Border Forum on Energy Issues: Security and Assurance of North American Energy Systems. Woodrow Wilson Center for International Scholars. Washington, DC, October 13, 2006.
 122. “Determining the Economic Value of Coastal Preservation and Restoration on Critical Energy Infrastructure.” (2006) The Economic and Market Impacts of Coastal Restoration: America’s Wetland Economic Forum II. Washington, DC September 28, 2006.
 123. “Relationships between Power and Other Critical Energy Infrastructure.” (2006). Rebuilding the New Orleans Region: Infrastructure Systems and Technology Innovation Forum. United Engineering Foundation. New Orleans, LA, September 24-25, 2006.
 124. “Outlook, Issues, and Trends in Energy Supplies and Prices.” (2006.) Presentation to the Southern States Energy Board, Associate Members Meeting. New Orleans, Louisiana. July 14, 2006.
 125. “Energy Sector Outlook.” (2006). Baton Rouge Country Club Meeting. Baton Rouge, Louisiana. July 11, 2006.
 126. “Oil and Gas Industry Post 2005 Storm Events.” (2006). American Petroleum Institute, Teche Chapter. Production, Operations, and Regulations Annual Meeting. Lafayette, Louisiana. June 29, 2006.
 127. “Concentration of Energy Infrastructure in Hurricane Regions.” (2006). Presentation before the National Commission on Energy Policy Forum: Ending the Stalemate on LNG Facility Siting. Washington, DC. June 21, 2006.
 128. “LNG—A Premier.” (2006). Presentation Given to the U.S. Department of Energy’s “LNG Forums.” Los Angeles, California. June 1, 2006.

129. "Regional Energy Infrastructure, Production and Outlook." (2006). Executive Briefing for Board of Directors, Louisiana Oil and Gas Plc., Enhanced Exploration, Inc. and Energy Self-Service, Inc. Covington, Louisiana, May 12, 2006.
130. "The Impacts of the Recent Hurricane Season on Energy Production and Infrastructure and Future Outlook." Presentation before the Industrial Energy Technology Conference 2006. New Orleans, Louisiana, May 9, 2006.
131. "Update on Regional Energy Infrastructure and Production." (2006). Executive Briefing for Delegation Participating in U.S. Department of Commerce Gulf Coast Business Investment Mission. Baton Rouge, Louisiana May 5, 2006.
132. "Hurricane Impacts on Energy Production and Infrastructure." (2006). Presentation before the Interstate Natural Gas Association of America Mid-Year Meeting. Hyatt Regency Hill Country. April 21, 2006.
133. "LNG—A Premier." Presentation Given to the U.S. Department of Energy's "LNG Forums." Astoria, Washington. April 28, 2006.
134. Natural Gas Market Outlook. Invited Presentation Given to the Georgia Public Service Commission and Staff. Georgia Institute of Technology, Atlanta, Georgia. March 10, 2006.
135. The Impacts of Hurricanes Katrina and Rita on Louisiana's Energy Industry. Presentation to the Louisiana Economic Development Council. Baton Rouge, Louisiana. March 8, 2006.
136. Energy Markets: Hurricane Impacts and Outlook. Presentation to the 2006 Louisiana Independent Oil and Gas Association Annual Conference. L'Auberge du Lac Resort and Casino. Lake Charles, Louisiana. March 6, 2006
137. Energy Market Outlook and Update on Hurricane Damage to Energy Infrastructure. Presentation to the Energy Council 2005 Global Energy and Environmental Issues Conference. Santa Fe, New Mexico, December 10, 2005.
138. "Putting Our Energy Infrastructure Back Together Again." Presentation Before the 117th Annual Convention of the National Association of Regulatory Utility Commissioners (NARUC). November 15, 2005. Palm Springs, CA
139. "Hurricanes and the Outlook for Energy Markets." Presentation before the Baton Rouge Rotary Club. November 9, 2005, Baton Rouge, LA.
140. "Hurricanes, Energy Supplies and Prices." Presentation before the Louisiana Department of Natural Resources and Atchafalaya Basin Committee Meeting. November 8, 2005. Baton Rouge, LA.
141. "The Impact of the Recent Hurricane's on Louisiana's Energy Industry." Presentation before the Louisiana Independent Oil and Gas Association Board of Directors Meeting. November 8, 2005. Baton Rouge, LA.
142. "The Impact of the Recent Hurricanes on Louisiana's Infrastructure and National Energy Markets." Presentation before the Baton Rouge City Club Distinguished Speaker Series. October 13, 2005. Baton Rouge, LA.
143. "The Impact of the Recent Hurricanes on Louisiana's Infrastructure and National Energy Markets." Presentation before Powering Up: A Discussion About the Future of

- Louisiana's Energy Industry. Special Lecture Series Sponsored by the Kean Miller Law Firm. October 13, 2005. Baton Rouge, LA.
144. "The Impact of Hurricane Katrina on Louisiana's Energy Infrastructure and National Energy Markets." Special Lecture on Hurricane Impacts, LSU Center for Energy Studies, September 29, 2005.
 145. "Louisiana Power Industry Overview." Presentation before the Clean Air Interstate Rule Implementation Stakeholders Meeting. August 11, 2005. Louisiana Department of Environmental Quality.
 146. "CES 2005 Legislative Support and Outlook for Energy Markets and Policy." Presentation before the LMOGA/LCA Annual Post-Session Legislative Committee Meeting. August 10-13, 2005. Perdido Key, Florida.
 147. "Electric Restructuring: Past, Present, and Future." Presentation to the Southeastern Association of Tax Administrators Annual Conference. Sheraton Hotel and Conference Facility. New Orleans, LA July 12, 2005.
 148. "The Outlook for Energy." Lagniappe Studies Continuing Education Course. Baton Rouge, LA. July 11, 2005.
 149. "The Outlook for Energy." Sunshine Rotary Club. Baton Rouge, LA. April 27, 2005.
 150. "Background and Overview of LNG Development." Energy Council Workshop on LNG/CNG. Biloxi, Ms: Beau Rivage Resort and Hotel, April 9, 2005.
 151. "Natural Gas Supply, Prices, and LNG: Implications for Louisiana Industry." Cytec Corporation Community Advisory Panel. Fortier, LA January 14, 2005.
 152. "The Economic Opportunities for a Limited Industrial Retail Choice Plan." Louisiana Department of Economic Development. Baton Rouge, Louisiana. November 19, 2004.
 153. "Energy Issues for Industrial Customers of Gas and Power." Louisiana Association of Business and Industry, Energy Council Meeting. Baton Rouge, Louisiana. October 11, 2004.
 154. "Energy Issues for Industrial Customers of Gas and Power." Annual Meeting of the Louisiana Chemical Association and the Louisiana Chemical Industry Alliance. Point Clear, Alabama. October 8, 2004.
 155. "Energy Issues for Industrial Customers of Gas and Power." American Institute of Chemical Engineers – New Orleans Section. New Orleans, LA. September 22, 2004.
 156. "Natural Gas Supply, Prices and LNG: Implications for Louisiana Industry." Dow Chemical Company Community Advisory Panel Meeting. Plaquemine, LA. August 9, 2004.
 157. "Energy Issues for Industrial Customers of Gas and Power." Louisiana Chemical Association Post-Legislative Meeting. Springfield, LA. August 9, 2004.
 158. "LNG In Louisiana." Joint Meeting of the Louisiana Economic Development Council and the Governors Cabinet Advisory Council. Baton Rouge, LA. August 5, 2004.
 159. "Louisiana Energy Issues." Louisiana Mid-Continent Oil and Gas Association Post Legislative Meetings. Sandestin, Florida. July 28, 2004.

160. "The Gulf South: Economic Opportunities Related to LNG." Presentation before the Energy Council's 2004 State and Provincial Energy and Environmental Trends Conference. Point Clear, AL, June 26, 2004.
161. "Natural Gas and LNG Issues for Louisiana." Presentation before the Rhodia Community Advisory Panel. May 20, 2004, Baton Rouge, LA.
162. "The Economic Opportunities for LNG Development in Louisiana." Presentation before the Louisiana Chemical Association Plant Managers Meeting. May 27, 2004. Baton Rouge, LA.
163. "The Economic Opportunities for LNG Development in Louisiana." Presentation before the Louisiana Chemical Association/Louisiana Chemical Industry Alliance Legislative Conference. May 26, 2004. Baton Rouge, LA.
164. "The Economic Opportunities for LNG Development in Louisiana." Presentation before the Petrochemical Industry Cluster, Greater New Orleans, Inc. May 19, 2004, Destrehan, LA.
165. "Industry Development Issues for Louisiana: LNG, Retail Choice, and Energy." Presentation before the LSU Center for Energy Studies Industry Associates. May 14, 2004, Baton Rouge, LA.
166. "The Economic Opportunities for LNG Development in Louisiana." Presentation before the Board of Directors, Greater New Orleans, Inc. May 13, 2004, New Orleans, LA.
167. "Natural Gas Outlook: Trends and Issues for Louisiana." Presentation before the Louisiana Joint Agricultural Association Meetings. January 14, 2004, Hotel Acadiana, Lafayette, Louisiana.
168. "Natural Gas Outlook" Presentation before the St. James Parish Community Advisory Panel Meeting. January 7, 2004, IMC Production Facility, Convent, Louisiana.
169. "Competitive Bidding in the Electric Power Industry." Presentation before the Association of Energy Engineers. Business Energy Solutions Expo. December 11-12, 2003, New Orleans, Louisiana.
170. "Regional Transmission Organization in the South: The Demise of SeTrans" Presentation before the LSU Center for Energy Studies Industry Associates Advisory Council Meeting. December 9, 2003. Baton Rouge, Louisiana.
171. "Affordable Energy: The Key Component to a Strong Economy." Presentation before the National Association of Regulatory Utility Commissioners ("NARUC"), November 18, 2003, Atlanta, Georgia.
172. "Natural Gas Outlook." Presentation before the Louisiana Chemical Association, October 17, 2003, Pointe Clear, Alabama.
173. "Issues and Opportunities with Distributed Energy Resources." Presentation before the Louisiana Biomass Council. April 17, 2003, Baton Rouge, Louisiana.
174. "What's Happened to the Merchant Energy Industry? Issues, Challenges, and Outlook" Presentation before the LSU Center for Energy Studies Industry Associates Advisory Council Meeting. November 12, 2002. Baton Rouge, Louisiana.

175. "An Introduction to Distributed Energy Resources." Presentation before the U.S. Department of Energy, Office of Renewable Energy and Energy Efficiency, State Energy Program/Rebuild America Conference, August 1, 2002, New Orleans, Louisiana.
176. "Merchant Energy Development Issues in Louisiana." Presentation before the Program Committee of the Center for Legislative, Energy, and Environmental Research (CLEER), Energy Council. April 19, 2002.
177. "Power Plant Siting Issues in Louisiana." Presentation before 24th Annual Conference on Waste and the Environment. Sponsored by the Louisiana Department of Environmental Quality. Lafayette, Louisiana, Cajundome. March 12, 2002.
178. "Merchant Power and Deregulation: Issues and Impacts." Presentation before the Air and Waste Management Association Annual Meeting. Baton Rouge, LA, November 15, 2001.
179. "Moving to the Front of the Lines: The Economic Impact of Independent Power Production in Louisiana." Presentation before the LSU Center for Energy Studies Merchant Power Generation and Transmission Conference, Baton Rouge, LA. October 11, 2001.
180. "Economic Impacts of Merchant Power Plant Development in Mississippi." Presentation before the U.S. Oil and Gas Association Annual Oil and Gas Forum. Jackson, Mississippi. October 10, 2001.
181. "Economic Opportunities for Merchant Power Development in the South." Presentation before the Southern Governor's Association/Southern State Energy Board Meetings. Lexington, KY. September 9, 2001.
182. "The Changing Nature of the Electric Power Business in Louisiana." Presentation before the Louisiana Department of Environmental Quality. Baton Rouge, LA, August 27, 2001.
183. "Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Interagency Group on Merchant Power Development. Baton Rouge, LA, July 16, 2001.
184. "The Changing Nature of the Electric Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Office of the Governor. Baton Rouge, LA, July 16, 2001.
185. "The Changing Nature of the Electric Power Business in Louisiana: Background and Issues." Presentation before the Louisiana Department of Economic Development. Baton Rouge, LA, July 3, 2001.
186. "The Economic Impacts of Merchant Power Plant Development In Mississippi." Presentation before the Mississippi Public Service Commission. Jackson, Mississippi, March 20, 2001.
187. "Energy Conservation and Electric Restructuring." With Ritchie D. Priddy. Presentation before the Louisiana Department of Natural Resources. Baton Rouge, Louisiana, October 23, 2000.
188. "Pricing and Regulatory Issues Associated with Distributed Energy." Joint Conference by Econ One Research, Inc., the Louisiana State University Distributed Energy Resources Initiative, and the University of Houston Energy Institute: "Is the Window Closing for Distributed Energy?" Houston, Texas, October 13, 2000.

189. "Electric Reliability and Merchant Power Development Issues." Technical Meetings of the Louisiana Public Service Commission. Baton Rouge, LA. August 29, 2000.
190. "A Introduction to Distributed Energy Resources." Summer Meetings, Southeastern Association of Regulatory Utility Commissioners (SEARUC). New Orleans, LA. June 27, 2000.
191. Roundtable Moderator/Discussant. Mid-South Electric Reliability Summit. U.S. Department of Energy. New Orleans, Louisiana. April 24, 2000.
192. "Electricity 101: Definitions, Precedents, and Issues." Energy Council's 2000 Federal Energy and Environmental Matters Conference. Loews L'Enfant Plaza Hotel, Washington, D.C. March 11-13, 2000.
193. "LSU/CES Distributed Energy Resources Initiatives." Los Alamos National Laboratories. Office of Energy and Sustainable Systems. Los Alamos, New Mexico. February 16, 2000.
194. "Distributed Energy Resources Initiatives." Louisiana State University, Center for Energy Studies Industry Associates Meeting. Baton Rouge, Louisiana. December 15, 1999.
195. "Merchant Power Opportunities in Louisiana." Louisiana Mid-Continent Oil and Gas Association (LMOGA) Power Generation Committee Meetings. Baton Rouge, Louisiana. November 10, 1999.
196. Roundtable Discussant. "Environmental Regulation in a Restructured Market" The Big E: How to Successfully Manage the Environment in the Era of Competitive Energy. PUR Conference. New Orleans, Louisiana. May 24, 1999.
197. "The Political Economy of Electric Restructuring In the South" Southeastern Electric Exchange, Rate Section Annual Conference. New Orleans, Louisiana. May 7, 1999.
198. "The Dynamics of Electric Restructuring in Louisiana." Joint Meeting of the American Association of Energy Engineers and the International Association of Facilities Managers. Metairie, Louisiana. April 29, 1999.
199. "The Implications of Electric Restructuring on Independent Oil and Gas Operations." Petroleum Technology Transfer Council Workshop: Electrical Power Cost Reduction Methods in Oil and Gas Field Operations. Lafayette, Louisiana, March 24, 1999.
200. "What's Happened to Electricity Restructuring in Louisiana?" Louisiana State University, Center for Energy Studies Industry Associates Meeting. March 22, 1999.
201. "A Short Course on Electric Restructuring." Central Louisiana Electric Company. Sales and Marketing Division. Mandeville, Louisiana, October 22, 1998.
202. "The Implications of Electric Restructuring on Independent Oil and Gas Operations." Petroleum Technology Transfer Council Workshop: Electrical Power Cost Reduction Methods in Oil and Gas Field Operations. Shreveport, Louisiana, October 13, 1998.
203. "How Will Utility Deregulation Affect Tourism." Louisiana Travel Promotion Association Annual Meeting, Alexandria, Louisiana. January 15, 1998.
204. "Reflections and Predictions on Electric Utility Restructuring in Louisiana." With Fred I. Denny. Louisiana State University, Center for Energy Studies Industry Associates Meeting. November 20, 1997.

205. "Electric Utility Restructuring in Louisiana." Hammond Chamber of Commerce, Hammond, Louisiana. October 30, 1997.
206. "Electric Utility Restructuring." Louisiana Association of Energy Engineers. Baton Rouge, Louisiana. September 11, 1997.
207. "Electric Utility Restructuring: Issues and Trends for Louisiana." Opelousas Chamber of Commerce, Opelousas, Louisiana. June 24, 1997.
208. "The Electric Utility Restructuring Debate In Louisiana: An Overview of the Issues." Annual Conference of the Public Affairs Research Council of Louisiana. Baton Rouge, Louisiana. March 25, 1997.
209. "Electric Restructuring: Louisiana Issues and Outlook for 1997." Louisiana State University, Center for Energy Studies Industry Associates Meeting, Baton Rouge, Louisiana, January 15, 1997.
210. "Restructuring the Electric Utility Industry." Louisiana Propane Gas Association Annual Meeting, Alexandria, Louisiana, December 12, 1996.
211. "Deregulating the Electric Utility Industry." Eighth Annual Economic Development Summit, Baton Rouge, Louisiana, November 21, 1996.
212. "Electric Utility Restructuring in Louisiana." Jennings Rotary Club, Jennings, Louisiana, November 19, 1996.
213. "Electric Utility Restructuring in Louisiana." Entergy Services, Transmission and Distribution Division, Energy Centre, New Orleans, Louisiana, September 12, 1996
214. "Electric Utility Restructuring" Louisiana Electric Cooperative Association, Baton Rouge, Louisiana, August 27, 1996.
215. "Electric Utility Restructuring -- Background and Overview." Louisiana Public Service Commission, Baton Rouge, Louisiana, August 14, 1996.
216. "Electric Utility Restructuring." Sunshine Rotary Club Meetings, Baton Rouge, Louisiana, August 8, 1996.
217. Roundtable Moderator, "Stakeholder Perspectives on Electric Utility Stranded Costs." Louisiana State University, Center for Energy Studies Seminar on Electric Utility Restructuring in Louisiana, Baton Rouge, May 29, 1996.
218. Panelist, "Deregulation and Competition." American Nuclear Society: Second Annual Joint Louisiana and Mississippi Section Meetings, Baton Rouge, Louisiana, April 20, 1996.

EXPERT WITNESS, LEGISLATIVE, AND PUBLIC TESTIMONY; EXPERT REPORTS, RECOMMENDATIONS, AND AFFIDAVITS

1. Expert Testimony. Docket No. 15-078-U. (2015). Before the Arkansas Public Service Commission. *In the Matter of the Joint Application of SourceGas Inc., SourceGas LLC, SourceGas Holdings LLC and Black Hills Utility Holdings, Inc. for all Necessary Authorizations and Approvals for Black Hills Utility Holdings, Inc. to Acquire SourceGas Holdings LLC.* On behalf of the Office of the Arkansas Attorney General. Issues: public policy and regulatory policy associated with the acquisition.

2. Expert Testimony. Docket No. 15-031-U. (2015). Before the Arkansas Public Service Commission. *In the Matter of the Application of SourceGas Arkansas Inc. for an Order Approving the Acquisition of Certain Storage Facilities and the Recovery of Investments and Expenses Associated Therewith.* On behalf of the Office of the Arkansas Attorney General. Issues: cost-benefit analysis, transmission cost analysis, and a due diligence analysis.
3. Expert Testimony. Docket No. 15-015-U. (2015). Before the Arkansas Public Service Commission. *In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service.* On behalf of the Office of the Arkansas Attorney General. Issues: economic development riders and production plant cost allocation.
4. Expert Testimony. Docket No. 7970. (2015). Before the Vermont Public Service Board. *Petition of Vermont Gas Systems, Inc., for a certificate of public good pursuant to 30 V.S.A. § 248, authorizing the construction of the "Addison Natural Gas Project" consisting of approximately 43 miles of new natural gas transmission pipeline in Chittenden and Addison Counties, approximately 5 miles of new distribution mainlines in Addison County, together with three new gate stations in Williston, New Haven, and Middlebury, Vermont.* On behalf of AARP-Vermont. Issues: net economic benefits of proposed natural gas transmission project.
5. Expert Testimony. File No. ER-2014-0370 (2015). Before the Public Service Commission of the State of Missouri. *In the Matter of Kansas City Power & Light Company for Authority Implement A General Rate Increase for Electric Service.* On behalf of the Missouri Office of the People's Counsel. Issues: customer charges, rate design, revenue distribution, class cost of service, and policy and ratemaking considerations in connection with electric vehicle charging stations.
6. Expert Testimony. File No. ER-2014-0351 (2015). Before the Public Service Commission of the State of Missouri. *In the Matter of The Empire District Electric Company for Authority To File Tariffs Increasing Rates for Electric Service Provided to Customers In the Company's Missouri Service Area.* On behalf of the Missouri Office of the People's Counsel. Issues: customer charges, rate design, revenue distribution, and class cost of service.
7. Expert Testimony. D.P.U. 14-130 (2015). Before the Massachusetts Department of Public Utilities. *Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for approval by the Department of Public Utilities of the Company's 2015 Gas System Enhancement Program Plan, pursuant to G.L. c. 164, § 145, and for rates effective May 1, 2015.* On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.
8. Expert Testimony. D.P.U. 14-131 (2015). Before the Massachusetts Department of Public Utilities. *Petition of The Berkshire Gas Company for approval by the Department of Public Utilities of the Company's Gas System Enhancement Program Plan for 2015, pursuant to G.L. c. 164, § 145, and for rates effective May 1, 2015.* On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.
9. Expert Testimony. D.P.U. 14-132 (2015). Before the Massachusetts Department of Public Utilities. *Petition of Boston Gas Company and Colonial Gas Company d/b/a*

- National Grid for approval by the Department of Public Utilities of the Companies' Gas System Enhancement Program for 2015, pursuant to G.L. c. 164, § 145, and for rates effective May 1, 2015. On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.*
10. Expert Testimony. D.P.U. 14-133 (2015). Before the Massachusetts Department of Public Utilities. *Petition of Liberty Utilities for approval by the Department of Public Utilities of the Company's Gas System Enhancement Program Plan for 2015, pursuant to G.L. c. 164, § 145, and for rates effective May 1, 2015. On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.*
 11. Expert Testimony. D.P.U. 14-134 (2015). Before the Massachusetts Department of Public Utilities. *Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for approval by the Department of Public Utilities of the Company's Gas System Enhancement Program Plan for 2015, pursuant to G.L. c. 164, § 145, and for rates to be effective May 1, 2015. On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.*
 12. Expert Testimony. D.P.U. 14-135 (2015). Before the Massachusetts Department of Public Utilities. *Petition of NSTAR Gas Company for approval by the Department of Public Utilities of the Company's Gas System Enhancement Program Plan for 2015, pursuant to G.L. c. 164, § 145, and for rates to be effective May 1, 2015. On behalf of the Attorney General's Office. Issues: ratepayer protections, cost allocations, rate design, performance metrics.*
 13. Expert Testimony. F.C. 1119 (2014). Before the District of Columbia Public Service Commission. *In the Matter of the Merger of Exelon Corporation, Pepco Holdings, Inc., Potomac Electric Power Company, Exelon Energy Delivery Company, LLC, and new Special Purpose Entity, LLC. On behalf of the Office of the People's Counsel. Issues: economic impact analysis, reliability, consumer investment fund, regulatory oversight, impacts to competitive electricity markets.*
 14. Expert Testimony. D.P.U. 14-86 (2014). Before the Massachusetts Department of Public Utilities. *Joint Petition of the Department of Environmental Protection and the Department of Energy Resources requesting the Department of Public Utilities to adopt the avoided costs of complying with the Global Warming Solutions Act, using the marginal abatement cost curve method, in assessing the cost effectiveness of energy efficiency programs. On behalf of the Office of the Ratepayer Advocate. Issues: public policy, carbon emissions, marginal abatement cost curve analysis.*
 15. Expert Report. Civil Action 1:08-cv-0046 (2014). Before the U.S. District Court for the Southern District of Ohio. *Anthony Williams, et al., v. Duke Energy International, Inc., et al. On behalf of Markovits, Stock & DeMarco, Attorneys & Counselors at Law. Issues: public utility regulation, electric power markets, economic harm.*
 16. Expert Testimony. D.P.U. 14-64 (2014). Before the Massachusetts Department of Public Utilities. *NSTAR Gas Company/HOPCO Gas Services Agreement. On behalf of the Office of the Public Advocate. Issues: certain ratemaking features associated with the proposed Gas Service Agreement.*
 17. Expert Testimony. Docket Nos. 14-0224 and 14-0225 (2014). Before the Illinois Commerce Commission. *In the Matter of the Peoples Gas Light and Coke Company and*

- North Shore Gas Company Proposed General Increase in Rates for Gas Service (consolidated)*. On behalf of the People of the State of Illinois. Issues: test year expenses, cost benchmarking analysis, pipeline replacement, and leak rate comparisons.
18. Expert Testimony. Docket 8191 (2014). Before the Vermont Public Service Board. *In Re: Petition of Green Mountain Power Corporation for Approval of a Successor Alternative Regulation Plan*. On the behalf of AARP-Vermont. Issues: Alternative Regulation.
 19. Expert Testimony. Docket No. 2013-00168 (2014). Before the Maine Public Utilities Commission. *In the Matter of the Request for Approval of an Alternative Rate Plan (ARP 2014) Pertaining to Central Maine Power Company*. On behalf of the Office of the Public Advocate. Issues: class cost of service study, marginal cost of service study, revenue distribution and rate design.
 20. Expert Testimony. D.P.U. 13-90 (2013). Before the Massachusetts Department of Public Utilities. *Petition of Fitchburg Gas and Electric Light Company (Electric Division) d/b/a Unitil to the Department of Public Utilities for approval of the rates and charges and increase in base distribution rates for electric service*. On behalf of the Office of the Ratepayer Advocate. Issues: capital cost adjustment mechanism and performance-based regulation.
 21. Expert Testimony. BPU Docket Nos. EO13020155 and GO13020156. (2013). Before the State of New Jersey Board of Public Utilities. *I/M/O The Petition of Public Service Electric & Gas Company for the Approval of the Energy Strong Program*. On behalf of the Division of Rate Counsel. Issues: economic impact, infrastructure replacement program rider, pipeline replacement, leak rate comparisons and cost benefit analysis.
 22. Expert Testimony. D.P.U. 13-75 (2013). Before the Massachusetts Department of Public Utilities. *Investigation by the Department of Public Utilities on its Own Motion as to the Propriety of the Rates and Charges by Bay State Gas Company d/b/a Columbia Gas of Massachusetts set forth in Tariffs M.D.P.U. Nos. 140 through 173, and Approval of an Increase in Base Distribution Rates for Gas Service Pursuant to G.L. c. 164, § 94 and 220 C.M.R. § 5.00 et seq., filed with the Department on April 16, 2013, to be effective May 1, 2013*. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Target infrastructure replacement program rider, pipeline replacement, and leak rate comparisons; environmental benefits analysis; O&M offset; and cost benchmarking analysis.
 23. Expert Testimony. Docket No. 13-115 (2013). Before the Delaware Public Service Commission. *In the Matter of the Application of Delmarva Power & Light Company FOR an Increase in Electric Base Rates and Miscellaneous Tariff Changes* (Filed March 22, 2013). On the Behalf of Division of the Public Advocate. Issues: pro forma infrastructure proposal, class cost of service study, revenue distribution, and rate design.
 24. Expert Testimony. Formal Case No. 1103 (2013). Before the Public Service Commission of the District of Columbia. *In the Matter of the Application of the Potomac Electric Power Company for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service*. On the Behalf of the Office of the People's Counsel of the District of Columbia. Issues: Pro forma adjustment for reliability investments.
 25. Expert Testimony. Case No. 9326 (2013). Before the Public Service Commission of

- Maryland. *In the Matter of the Application of Baltimore Gas and Electric Company for Adjustments to its Electric and Gas Base Rates*. On the Behalf of the Maryland Office of the People's Counsel. Issues: Electric Reliability Investment ("ERI") initiatives, pro forma gas infrastructure proposal, tracker mechanisms, class cost of service study, revenue distribution, and rate design
26. Rulemaking Testimony. (2013). Before the Louisiana Tax Commission. Examination of Louisiana Assessors' Association Well Diameter Analysis, economic development policies regarding midstream assets and industrial development.
 27. Expert Testimony. Case No. 9317 (2013). Before the Public Service Commission of Maryland. *In the Matter of the Application of Delmarva Power & Light Company for Adjustments to its Retail Rates for the Distribution of Electric Energy*. Direct, and Surrebuttal. On the Behalf of the Maryland Office of the People's Counsel. Issues: Grid Resiliency Charge, tracker mechanisms, pipeline replacement, class cost of service study, revenue distribution, and rate design.
 28. Expert Testimony. Case No. 9311 (2013). Before the Public Service Commission of Maryland. *In the Matter of the Application of Potomac Electric Power Company for an Increase in its Retail Rates for the Distribution of Electric Energy*. Direct, and Surrebuttal. On the Behalf of the Maryland Office of the People's Counsel. Issues: Grid Resiliency Charge, tracker mechanisms, pipeline replacement, class cost of service study, revenue distribution, and rate design.
 29. Expert Testimony. Docket No. 12AL-1268G (2013). Before the Public Utilities Commission of the State of Colorado. *In the Matter of the Tariff Sheets Filed by Public Service Company of Colorado with Advice No. 830 – Gas. Answer*. On the Behalf of the Colorado Office of Consumer Counsel. Issues: Pipeline System Integrity Adjustment, tracker mechanisms, pipeline replacement and leak rate comparisons.
 30. Expert Testimony. BPU Docket No. EO12080721 (2013). Before the New Jersey Board of Public Utilities. *In the Matter of the Public Service Electric & Gas Company for Approval of an Extension of Solar Generation Program*. On the Behalf of the New Jersey Division of Rate Counsel. Direct, Rebuttal, Surrebuttal. Issues: solar energy market design, solar energy market conditions, solar energy program design and net economic benefits.
 31. Expert Testimony. BPU Docket No. EO12080726 (2013). Before the New Jersey Board of Public Utilities. *In the Matter of the Petition of Public Service Electric & Gas Company for Approval of a Solar Loan III Program*. On the Behalf of the New Jersey Division of Rate Counsel. Direct, Rebuttal and Surrebuttal. Issues: solar energy market design, solar energy market conditions, solar energy program design.
 32. Expert Testimony. BPU Docket No. EO11050314V. (2012). Before the New Jersey Board of Public Utilities. *In the Matter of the Petition of Fishermen's Atlantic City Windfarm, LLC for the Approval of the State Waters Project and Authorizing Offshore Wind Renewable Energy Certificates*. On the Behalf of the New Jersey Division of Rate Counsel. December 17, 2012. Issues: approval of offshore wind project and ratepayer financial support for the proposed project.
 33. Expert Testimony. D.P.U. 12-25. (2012). Before the Massachusetts Department of Public Utilities. *In the Matter of Bay State Gas Company d/b/a/ Columbia Gas Company of Massachusetts Request for Increase in Rates*. On the Behalf of the Office of the

- Attorney General, Office of Ratepayer Advocacy. Issues: Target infrastructure replacement program rider, pipeline replacement and leak rate comparisons.
34. Expert Testimony. Docket Nos. UE-120436, et.al. (consolidated). (2012). Before the Washington Utilities and Transportation Commission. *Washington Utilities and Transportation Commission v. Avista Corporation D/B/A Avista Utilities*. On the Behalf of the Washington Attorney General, Office of the Public Counsel. Issues: Revenue Decoupling, lost revenues, tracker mechanisms, attrition adjustments.
 35. Expert Testimony. Case No. 9286. (2012) Before the Public Service Commission of Maryland. *In Re: Potomac Electric Power Company ("Pepco") General Rate Case*. On the Behalf of the Maryland Office of the People's Counsel. Issues: Capital tracker mechanisms/reliability investment mechanisms, reliability issues, regulatory lag, class cost of service, revenue distribution, rate design.
 36. Expert Testimony. Case No 9285. (2012) Before the Public Service Commission of Maryland. *In Re: the Delmarva Power and Light Company General Rate Case*. On the Behalf of the Maryland Office of the People's Counsel. Issues: Capital tracker mechanisms/reliability investment mechanisms, reliability issues, regulatory lag, class cost of service, revenue distribution, rate design.
 37. Expert Testimony. Docket Nos. UE-110876 and UG-110877 (consolidated). (2012). Before the Washington Utilities and Transportation Commission. *Washington Utilities and Transportation Commission v. Avista Corporation D/B/A Avista Utilities*. On the Behalf of the Washington Attorney General, Office of the Public Counsel. Issues: Revenue Decoupling, lost revenues, tracker mechanisms.
 38. Expert Testimony. BPU Docket No. EO11050314V. (2012). Before the New Jersey Board of Public Utilities. *In the Matter of the Petition of Fishermen's Atlantic City Windfarm, LLC for the Approval of the State Waters Project and Authorizing Offshore Wind Renewable Energy Certificates*. On the Behalf of the New Jersey Division of Rate Counsel. February 3, 2012. Issues: approval of offshore wind project and ratepayer financial support for the proposed project.
 39. Expert Testimony. Docket No. NG 0067. (2012). Before the Public Service Commission of Nebraska. *In the Matter of the Application of SourceGas Distribution, LLC Approval of a General Rate Increase*. On the Behalf of the Public Advocate. January 31, 2012. Issues: Revenue Decoupling, Customer Adjustments, Weather Normalization Adjustments, Class Cost of Service Study, Rate Design.
 40. Expert Testimony. Docket No. G-04204A-11-0158. (2011). Before the Arizona Corporation Commission. On the Behalf of the Arizona Corporation Commission Staff. *In the Matter of the Application of UNS Gas, Inc. for the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of Its Arizona Properties*. Issues: Revenue Decoupling; Class Cost of Service Modeling; Revenue Distribution; Rate Design.
 41. Expert Testimony. Formal Case Number 1087. (2011). Before the Public Service Commission of the District of Columbia. On the Behalf of the Office of the People's Counsel of the District of Columbia. *In the Matter of the Application of Potomac Electric Power Company for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service*. Issues: Regulatory lag, ratemaking principles, reliability-related capital expenditure tracker proposals.

42. Expert Affidavit. Case No. 11-1364. (2011). *The State of Louisiana, the Louisiana Department of Environmental Quality, and the Louisiana Public Service Commission v. United States Environmental Protection Agency and Lisa P. Jackson*. Before the United States Court of Appeals for the District of Columbia Circuit. On the behalf of the State of Louisiana, the Louisiana Department of Environmental Quality, and the Louisiana Public Service Commission. Issues: Impacts of environmental costs on electric utilities, compliance requirements, investment cost of mitigation equipment, multi-area dispatch modeling and plant retirements.
43. Expert Affidavit. Docket No. EPA-HQ-OAR-2009-0491. (2011). Before the U.S. Environmental Protection Agency. *Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals*. On the Behalf of the Louisiana Public Service Commission. Issues: Impacts of environmental costs on electric utilities, compliance requirements, investment cost of mitigation equipment, multi-area dispatch modeling and plant retirements.
44. Expert Testimony. Case No. 9296. (2011). Before the Maryland Public Service Commission. *On the Behalf of the Maryland Office of People's Counsel. In the Matter of the Application of Washington Gas Light Company for Authority to Increase Existing Rates and Charges and Revise its Terms and Conditions for Gas Service*. Issues: Infrastructure Cost Recovery Rider; Class Cost of Service Modeling; Revenue Distribution; Rate Design.
45. Expert Testimony. Docket No. G-01551A-10-0458. (2011). Before the Arizona Corporation Commission. On the Behalf of the Arizona Corporation Commission Staff. *In the Matter of the Application of Southwest Gas Corporation for the Establishment of Just and Reasonable Rates and Charges Designed to Realize A Reasonable Rate of Return on the Fair Value of its Properties throughout Arizona*. Issues: Revenue Decoupling; Class Cost of Service Modeling; Revenue Distribution; Rate Design.
46. Expert Testimony. Docket No. 11-0280 and 11-0281. (2011). Before the Illinois Commerce Commission. On the Behalf of the Illinois Attorney General, the Citizens Utility Board, and the City of Chicago, Illinois. *In re: Peoples Gas Light and Coke Company and North Shore Natural Gas Company*. Issues: Revenue Decoupling and Rate Design. (Direct and Rebuttal)
47. Expert Testimony. D.P.U. 11-01. (2011). Before the Massachusetts Department of Public Utilities. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. *Petition of the Fitchburg Electric and Gas Company (Electric Division) for Approval of A General Increase in Electric Distribution Rates and Approval of a Revenue Decoupling Mechanism*. Issues: Capital Cost Rider, Revenue Decoupling.
48. Expert Testimony. D.P.U. 11-02. (2011). Before the Massachusetts Department of Public Utilities. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. *Petition of the Fitchburg Electric and Gas Company (Gas Division) for Approval of A General Increase in Electric Distribution Rates and Approval of a Revenue Decoupling Mechanism*. Issues: Pipeline Replacement Rider, Revenue Decoupling.
49. Expert Affidavit. Docket No. EL-11-13 (2011). Before the Federal Energy Regulatory Commission. *Petition for Preliminary Ruling, Atlantic Grid Operations*. On the Behalf of the New Jersey Division of Rate Counsel. Issues: Offshore wind generation development, offshore wind transmission development, ratemaking treatment of

- development costs, transmission development incentives.
50. Expert Opinion. Case No. CI06-195. (2011). Before the District Court of Jefferson County, Nebraska. On the Behalf of the City of Fairbury, Nebraska and Michael Beachler. In re: Endicott Clay Products Co. vs. City of Fairbury, Nebraska and Michael Beachler. Issues: rate design and ratemaking, time of use and time differentiated rate structures, empirical analysis of demand and usage trends for tariff eligibility requirements.
 51. Expert Testimony. D.P.U. 10-114. (2010). Before the Massachusetts Department of Public Utilities. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Petition of the New England Gas Company for Approval of A General Increase in Electric Distribution Rates and Approval of a Revenue Decoupling Mechanism. Issues: infrastructure replacement rider.
 52. Expert Testimony. D.P.U. 10-70. (2010). Before the Massachusetts Department of Public Utilities. Petition of the Western Massachusetts Electric Company for Approval of A General Increase in Electric Distribution Rates and Approval of a Revenue Decoupling Mechanism. On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Revenue decoupling; infrastructure replacement rider; performance-based regulation; inflation adjustment mechanisms; and rate design.
 53. Expert Testimony. G.U.D. Nos. 998 & 9992. (2010). Before the Texas Railroad Commission. In the Matter of the Rate Case Petition of Texas Gas Services, Inc. On the Behalf of the City of El Paso, Texas. Issues: Cost of service, revenue distribution, rate design, and weather normalization.
 54. Expert Testimony. B.P.U Docket No. GR10030225. (2010). Before the New Jersey Board of Public Utilities. In the Matter of the Petition of New Jersey Natural Gas Company for Approval of Regional Greenhouse Gas Initiative Programs and Associated Cost Recovery Mechanisms Pursuant to N.J.S.A. 48:3-98.1. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: solar energy proposals, solar securitization issues, solar energy policy issues.
 55. Expert Testimony. D.P.U. 10-55. (2010). Before the Massachusetts Department of Public Utilities. Investigation Into the Propriety of Proposed Tariff Changes for Boston Gas Company, Essex Gas Company, and Colonial Gas Company. (d./b./a. National Grid). On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Revenue decoupling; pipeline-replacement rider; performance-based regulation; partial productivity factor estimates, inflation adjustment mechanisms; and rate design.
 56. Expert Testimony. Cause No.43839. (2010). Before the Indiana Utility Regulatory Commission. In the Matter of Southern Indiana Gas and Electric Company d/b/a/ Vectren Energy Delivery of Indiana, Inc. (Vectren South-Electric). On the behalf of the Indiana Office of Utility Consumer Counselor (OUCC). Issues: revenue decoupling, variable production cost riders, gains on off-system sales, transmission cost riders.
 57. Congressional Testimony. Before the United States Congress. (2010). U.S. House of Representatives, Committee on Natural Resources. Hearing on the Consolidated Land, Energy, and Aquatic Resources Act. June 30, 2010.
 58. Expert Testimony. Before the City Counsel of El Paso, Texas; Public Utility Regulatory

- Board. (2010). On the Behalf of the City of El Paso. In Re: Rate Application of Texas Gas Services, Inc. Issues: class cost of service study (minimum system and zero intercept analysis), rate design proposals, weather normalization adjustment, and its cost of service adjustment clause, conservation adjustment clause proposals, and other cost tracker policy issues.
59. Expert Testimony. Docket 09-00183. (2010). Before the Tennessee Regulatory Authority. In the Matter of the Petition of Chattanooga Gas Company for a General Rate Increase, Implementation of the EnergySMART Conservation Programs, and Implementation of a Revenue Decoupling Mechanism. On the Behalf of Tennessee Attorney General, Consumer Advocate & Protection Division. Issues: revenue decoupling and energy efficiency program review and cost effectiveness analysis.
 60. Expert Testimony and Exhibits. Docket No. 10-240. (2010). Before the Louisiana Office of Conservation. In Re: Cadeville Gas Storage, LLC. On the Behalf of Cardinal Gas Storage, LLC. Issues: alternative uses and relative economic benefits of conversion of depleted hydrocarbon reservoir for natural gas storage purposes.
 61. Expert Testimony. Docket No. 09505-EI. (2010). Before the Florida Public Service Commission. In Re: Review of Replacement Fuel Costs Associated with the February 26, 2008 outage on Florida Power & Light's Electrical System. On the Behalf of the Florida Office of Public Counsel for the Citizens of the State of Florida. Issues: Replacement costs for power outage, regulatory policy/generation development incentives, renewable and energy efficiency incentives.
 62. Expert Testimony. Docket 09-00104. (2009). Before the Tennessee Regulatory Authority. In the Matter of the Petition of Piedmont Natural Gas Company, Inc. to Implement a Margin Decoupling Tracker Rider and Related Energy Efficiency and Conservation Programs. On the Behalf of the Tennessee Attorney General, Consumer Advocate & Protection Division. Issues: revenue decoupling, energy efficiency program review, weather normalization.
 63. Expert Testimony. Docket Number NG-0060. (2009). Before the Nebraska Public Service Commission. In the Matter of SourceGas Distribution, LLC Approval for a General Rate Increase. On the Behalf of the Nebraska Public Advocate. October 29, 2009. Issues: revenue decoupling, inflation trackers, infrastructure replacement riders, customer adjustment rider, weather normalization rider, weather normalization adjustments, estimation of normal weather for ratemaking purposes.
 64. Expert Report and Deposition. Before the 23rd Judicial District Court, Parish of Assumption, State of Louisiana. On the Behalf of Dow Hydrocarbons and Resources, Inc. September 1, 2009. (Deposition, November 23-24, 2009). Issues: replacement and repair costs for underground salt cavern hydrocarbon storage.
 65. Expert Testimony. D.P.U. 09-39. Before the Massachusetts Department of Public Utilities. (2009). Investigation Into the Propriety of Proposed Tariff Changes for Massachusetts Electric Company and Nantucket Electric Company (d./b./a. National Grid). On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Revenue decoupling; infrastructure rider; performance-based regulation; inflation adjustment mechanisms; revenue distribution; and rate design.
 66. Expert Testimony. D.P.U. 09-30. Before the Massachusetts Department of Public Utilities. (2009). In the Matter of Bay State Gas Company Request for Increase in Rates.

- On the Behalf of the Office of the Attorney General, Office of Ratepayer Advocacy. Issues: Revenue decoupling; target infrastructure replacement program rider; revenue distribution; and rate design.
67. Expert Testimony. Docket EO09030249. (2009). Before the New Jersey Board of Public Utilities. In the Matter of the Petition of Public Service Electric and Gas Company for Approval of a Solar Loan II Program and An Associated Cost Recovery Mechanism. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: solar energy market design, renewable portfolio standards, solar energy, and renewable financing/loan program design.
 68. Expert Testimony. Docket EO0920097. (2009). Before the New Jersey Board of Public Utilities. In the Matter of the Verified Petition of Rockland Electric Company for Approval of an SREC-Based Financing Program and An Associated Cost Recovery Mechanism. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: solar energy market design; renewable energy portfolio standards; solar energy.
 69. Expert Rebuttal Report. Civil Action No.: 2:07-CV-2165. (2009). Before the U.S. District Court, Western Division of Louisiana, Lake Charles Division. Prepared on the Behalf of the Transcontinental Pipeline Corporation. Issues: expropriation and industrial use of property.
 70. Expert Testimony. Docket EO06100744. (2008). Before the New Jersey Board of Public Utilities. In the Matter of the Renewable Portfolio Standard – Amendments to the Minimum filing Requirements for Energy Efficiency, Renewable Energy, and Conservation Programs and For Electric Distribution Company Submittals of Filings in connection with Solar Financing (Atlantic City Electric Company). On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: Solar energy market design; renewable energy portfolio standards; solar energy. (Rebuttal and Surrebuttal)
 71. Expert Testimony. Docket EO08090840. (2008). Before the New Jersey Board of Public Utilities. In the Matter of the Renewable Portfolio Standard – Amendments to the Minimum filing Requirements for Energy Efficiency, Renewable Energy, and Conservation Programs and For Electric Distribution Company Submittals of Filings in connection with Solar Financing (Jersey Central Power & Light Company). On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: Solar energy market design; renewable energy portfolio standards; solar energy. (Rebuttal and Surrebuttal)
 72. Expert Testimony. Docket UG-080546. (2008). Before the Washington Utilities and Transportation Commission. On the Behalf of the Washington Attorney General (Public Counsel Section). Issues: Rate Design, Cost of Service, Revenue Decoupling, Weather Normalization.
 73. Congressional Testimony. (2008). Senate Republican Conference: Panel on Offshore Drilling in the Restricted Areas of the Outer Continental Shelf. September 18, 2008.
 74. Expert Testimony. Appeal Number 2007-125 and 2007-299. (2008). Before the Louisiana Tax Commission. On the Behalf of Jefferson Island Storage and Hub, LLC (AGL Resources). Issues: Valuation Methodologies, Underground Storage Valuation, LTC Guidelines and Policies, Public Purpose of Natural Gas Storage. July 15, 2008 and August 20, 2008.

75. Expert Testimony. Docket Number 07-057-13. (2008). Before the Utah Public Service Commission. In the Matter of the Application of Questar Gas Company to File a General Rate Case. On the Behalf of the Utah Committee of Consumer Services. Issues: Cost of Service, Rate Design. August 18, 2008 (Direct, Rebuttal, Surrebuttal).
76. Rulemaking Testimony. (2008). Before the Louisiana Tax Commission. Examination of Replacement Cost Tables, Depreciation and Useful Lives for Oil and Gas Properties. Chapter 9 (Oil and Gas Properties) Section. August 5, 2008.
77. Legislative Testimony. (2008). Examination of Proposal to Change Offshore Natural Gas Severance Taxes (HB 326 and Amendments). Joint Finance and Appropriations Committee of the Alabama Legislature. March 13, 2008.
78. Public Testimony. (2007). Issues in Environmental Regulation. Testimony before Gubernatorial Transition Committee on Environmental Regulation (Governor-Elect Bobby Jindal). December 17, 2007.
79. Public Testimony. (2007). Trends and Issues in Alternative Energy: Opportunities for Louisiana. Testimony before Gubernatorial Transition Committee on Natural Resources (Governor-Elect Bobby Jindal). December 13, 2007.
80. Expert Report and Recommendation: Docket Number S-30336 (2007). Before the Louisiana Public Service Commission. In re: Entergy Gulf States, Inc. Application for Approval of Advanced Metering Pilot Program. Issues: pilot program for demand response programs and advanced metering systems.
81. Expert Testimony. Docket EO07040278 (2007). Before the New Jersey Board of Public Utilities. In the Matter of the Petition of Public Service Electric & Gas Company for Approval of a Solar Energy Program and An Associated Cost Recovery Mechanism. On the Behalf of the Department of the Public Advocate, Division of Rate Counsel. Issues: renewable energy market development, solar energy development, SREC markets, rate impact analysis, cost recovery issues.
82. Expert Testimony: Docket Number 05-057-T01 (2007). Before the Utah Public Service Commission. In the Matter of: Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for Approval of the Conservation Enabling Tariff Adjustment Options and Accounting Orders. On the behalf of the Utah Committee of Consumer Services. Issues: Revenue Decoupling, Demand-side Management; Energy Efficiency policies. (Direct, Rebuttal, and Surrebuttal Testimony)
83. Expert Testimony (Non-sworn rulemaking testimony) Docket Number RR-2008, (2007). Before the Louisiana Tax Commission. In re: Commission Consideration of Amendment and/or Adoption of Tax Commission Real/Personal Property Rules and Regulations. Issues: Louisiana oil and natural gas production trends, appropriate cost measures for wells and subsurface property, economic lives and production decline curve trends.
84. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29213 & 29213-A, ex parte, (2007). Before the Louisiana Public Service Commission. In re: Investigation to determine if it is appropriate for LPSC jurisdictional electric utilities to provide and install time-based meters and communication devices for each of their customers which enable such customers to participate in time-based pricing rate schedules and other demand response programs. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: demand response

- programs, advanced meter systems, cost recovery issues, energy efficiency issues, regulatory issues.
85. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29712, ex parte, (2007) Before the Louisiana Public Service Commission. In re: Investigation into the ratemaking and generation planning implications of nuclear construction in Louisiana. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: nuclear cost power plant development, generation planning issues, and cost recovery issues.
 86. Expert Testimony, Case Number U-14893, (2006). Before the Michigan Public Service Commission. In the Matter of SEMCO Energy Gas Company for Authority to Redesign and Increase Its Rates for the Sale and Transportation of Natural Gas In its MPSC Division and for Other Relief. On the behalf of the Michigan Attorney General. Issues: Rate Design, revenue decoupling, financial analysis, demand-side management program and energy efficiency policy. (Direct and Rebuttal Testimony).
 87. Expert Report, Recommendation, and Proposed Rule: Docket Number R-29380, ex parte, (2006). Before the Louisiana Public Service Commission. In re: An Investigation Into the Ratemaking and Generation Planning Implications of the U.S. EPA Clean Air Interstate Rule. On the behalf of the Louisiana Public Service Commission Staff. Report and Recommendation. Issues: environmental regulation and cost recovery; allowance allocations and air credit markets; ratepayer impacts of new environmental regulations.
 88. Expert Affidavit Before the Louisiana Tax Commission (2006). On behalf of ANR Pipeline, Tennessee Gas Transmission and Southern Natural Gas Company. Issues: Competitive nature of interstate and intrastate transportation services.
 89. Expert Affidavit Before the 19th Judicial District Court (2006). Suit Number 491, 453 Section 26. On behalf of Transcontinental Pipeline Corporation, et.al. Issues: Competitive nature of interstate and intrastate transportation services.
 90. Expert Testimony: Docket Number 05-057-T01 (2006). Before the Utah Public Service Commission. In the Matter of: Joint Application of Questar Gas Company, the Division of Public Utilities, and Utah Clean Energy for Approval of the Conservation Enabling Tariff Adjustment Options and Accounting Orders. On the behalf of the Utah Committee of Consumer Services. Issues: Revenue Decoupling, Demand-side Management; Energy Efficiency policies. (Rebuttal and Supplemental Rebuttal Testimony)
 91. Legislative Testimony (2006). Senate Committee on Natural Resources. Senate Bill 655 Regarding Remediation of Oil and Gas Sites, Legacy Lawsuits, and the Deterioration of State Drilling.
 92. Expert Report: Rulemaking Docket (2005). Before the New Jersey Bureau of Public Utilities. In re: Proposed Rulemaking Changes Associated with New Jersey's Renewable Portfolio Standard. Expert Report. The Economic Impacts of New Jersey's Proposed Renewable Portfolio Standard. On behalf of the New Jersey Office of Ratepayer Advocate. Issues: Renewable Portfolio Standards, rate impacts, economic impacts, technology cost forecasts.
 93. Expert Testimony: Docket Number 2005-191-E. (2005). Before the South Carolina Public Service Commission. On behalf of NewSouth Energy LLC. In re: General Investigation Examining the Development of RFP Rules for Electric Utilities. Issues:

- Competitive bidding; merchant development. (Direct and Rebuttal Testimony).
94. Expert Testimony: Docket No. 05-UA-323. (2005). Before the Mississippi Public Service Commission. On the behalf of Calpine Corporation. In re: Entergy Mississippi's Proposed Acquisition of the Attala Generation Facility. Issues: Asset acquisition; merchant power development; competitive bidding.
 95. Expert Testimony: Docket Number 050045-EI and 050188-EI. (2005). Before the Florida Public Service Commission. On the behalf of the Citizens of the State of Florida. In re: Petition for Rate Increase by Florida Power & Light Company. Issues: Load forecasting; O&M forecasting and benchmarking; incentive returns/regulation.
 96. Expert Testimony (non-sworn, rulemaking): Comments on Decreased Drilling Activities in Louisiana and the Role of Incentives. (2005). Louisiana Mineral Board Monthly Docket and Lease Sale. July 13, 2005
 97. Legislative Testimony (2005). Background and Impact of LNG Facilities on Louisiana. Joint Meeting of Senate and House Natural Resources Committee. Louisiana Legislature. May 19, 2005.
 98. Public Testimony. Docket No. U-21453. (2005). Technical Conference before the Louisiana Public Service Commission on an Investigation for a Limited Industrial Retail Choice Plan.
 99. Expert Testimony: Docket No. 2003-K-1876. (2005). On Behalf of Columbia Gas Transmission. Expert Testimony on the Competitive Market Structure for Gas Transportation Service in Ohio. Before the Ohio Board of Tax Appeals.
 100. Expert Report and Testimony: Docket No. 99-4490-J, *Lafayette City-Parish Consolidated Government, et. al. v. Entergy Gulf States Utilities, Inc. et. al.* (2005, 2006). On behalf of the City of Lafayette, Louisiana and the Lafayette Utilities Services. Expert Rebuttal Report of the Harborfront Consulting Group Valuation Analysis of the LUS Expropriation. Filed before 15th Judicial District Court, Lafayette, Louisiana.
 101. Expert Testimony: ANR Pipeline Company v. Louisiana Tax Commission (2005), Number 468,417 Section 22, 19th Judicial District Court, Parish of East Baton Rouge, State of Louisiana Consolidated with Docket Numbers: 480,159; 489,776;480,160; 480,161; 480,162; 480,163; 480,373; 489,776; 489,777; 489,778;489,779; 489,780; 489,803; 491,530; 491,744; 491,745; 491,746; 491,912;503,466; 503,468; 503,469; 503,470; 515,414; 515,415; and 515,416. In re: Market structure issues and competitive implications of tax differentials and valuation methods in natural gas transportation markets for interstate and intrastate pipelines.
 102. Expert Report and Recommendation: Docket No. U-27159. (2004). On Behalf of the Louisiana Public Service Commission Staff. Expert Report on Overcharges Assessed by Network Operator Services, Inc. Before the Louisiana Public Service Commission.
 103. Expert Testimony: Docket Number 2004-178-E. (2004). Before the South Carolina Public Service Commission. On behalf of Columbia Energy LLC. In re: Rate Increase Request of South Carolina Electric and Gas. (Direct and Surrebuttal Testimony)
 104. Expert Testimony: Docket Number 040001-EI. (2004). Before the Florida Public Service Commission. On behalf of Power Manufacturing Systems LLC, Thomas K. Churbuck, and the Florida Industrial Power Users Group. In re: Fuel Adjustment

- Proceedings; Request for Approval of New Purchase Power Agreements. Company examined: Florida Power & Light Company.
105. Expert Affidavit: Docket Number 27363. (2004). Before the Public Utilities Commission of Texas. Joint Affidavit on Behalf of the Cities of Texas and the Staff of the Public Utilities Commission of Texas Regarding Certified Issues. In Re: Application of Valor Telecommunications, L.P. For Authority to Establish Extended Local Calling Service (ELCS) Surcharges For Recovery of ELCS Surcharge.
 106. Expert Report and Testimony. Docket 1997-4665-PV, 1998-4206-PV, 1999-7380-PV, 2000-5958-PV, 2001-6039-PV, 2002-64680-PV, 2003-6231-PV. (2003) Before the Kansas Board of Tax Appeals. (2003). In the Matter of the Appeals of CIG Field Services Company from orders of the Division of Property Valuation. On the Behalf of CIG Field Services. Issues: the competitive nature of natural gas gathering in Kansas.
 107. Expert Report and Testimony: Docket Number U-22407. Before the Louisiana Public Service Commission (2002). On the Behalf of the Louisiana Public Service Commission Staff. Company examined: Louisiana Gas Services, Inc. Issues: Purchased Gas Acquisition audit, fuel procurement and planning practices.
 108. Expert Testimony: Docket Number 000824-EI. Before the Florida Public Service Commission. (2002). On the Behalf of the Citizens of the State of Florida. Company examined: Florida Power Corporation. Issues: Load Forecasts and Billing Determinants for the Projected Test Year.
 109. Public Testimony: Louisiana Board of Commerce and Industry (2001). Testimony on the Economic Impacts of Merchant Power Generation.
 110. Expert Testimony: Docket Number 24468. (2001). On the Behalf of the Texas Office of Public Utility Counsel. Public Utility Commission of Texas Staff's Petition to Determine Readiness for Retail Competition in the Portion of Texas Within the Southwest Power Pool. Company examined: AEP-SWEPCO.
 111. Expert Report. (2001) On Behalf of David Liou and Pacific Richland Products, Inc. to Review Cogeneration Issues Associated with Dupont Dow Elastomers, L.L.C. (DDE) and the Dow Chemical Company (Dow).
 112. Expert Testimony: Docket Number 01-1049, Docket Number 01-3001. (2001) On behalf the Nevada Office of Attorney General, Bureau of Consumer Protection. Petition of Central Telephone Company-Nevada D/b/a Sprint of Nevada and Sprint Communications L.P. for Review and Approval of Proposed Revised Performance Measures and Review and Approval of Performance Measurement Incentive Plans. Before the Public Utilities Commission of Nevada.
 113. Expert Affidavit: Multiple Dockets (2001). Before the Louisiana Tax Commission. On the Behalf of Louisiana Interstate Pipeline Companies. Testimony on the Competitive Nature of Natural Gas Transportation Services in Louisiana.
 114. Expert Affidavit before the Federal District Court, Middle District of Louisiana (2001). Issues: Competitive Nature of the Natural Gas Transportation Market in Louisiana. On behalf of a Consortium of Interstate Natural Gas Transportation Companies.
 115. Public Testimony: Louisiana Board of Commerce and Industry (2001). Testimony on the Economic and Ratepayer Benefits of Merchant Power Generation and Issues

Associated with Tax Incentives on Merchant Power Generation and Transmission.

116. Expert Testimony: Docket Number 01-1048 (2001). Before the Public Utilities Commission of Nevada. On the Behalf of the Nevada Office of the Attorney General, Bureau of Consumer Protection. Company analyzed: Nevada Bell Telephone Company. Issues: Statistical Issues Associated with Performance Incentive Plans.
117. Expert Testimony: Docket 22351 (2001). Before the Public Utility Commission of Texas. On the Behalf of the City of Amarillo. Company analyzed: Southwestern Public Service Company. Issues: Unbundled cost of service, affiliate transactions, load forecasting.
118. Expert Testimony: Docket 991779-EI (2000). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Competitive Nature of Wholesale Markets, Regional Power Markets, and Regulatory Treatment of Incentive Returns on Gains from Economic Energy Sales.
119. Expert Testimony: Docket 990001-EI (1999). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Regulatory Treatment of Incentive Returns on Gains from Economic Energy Sales.
120. Expert Testimony: Docket 950495-WS (1996). Before the Florida Public Service Commission. On the Behalf of the Citizens of the State of Florida. Company analyzed: Southern States Utilities, Inc. Issues: Revenue Repression Adjustment, Residential and Commercial Demand for Water Service.
121. Legislative Testimony. Louisiana House of Representatives, Special Subcommittee on Utility Deregulation. (1997). On Behalf of the Louisiana Public Service Commission Staff. Issue: Electric Restructuring.
122. Expert Testimony: Docket 940448-EG -- 940551-EG (1994). Before the Florida Public Service Commission. On the Behalf of the Legal Environmental Assistance Foundation. Companies analyzed: Florida Power & Light Company; Florida Power Corporation; Tampa Electric Company; and Gulf Power Company. Issues: Comparison of Forecasted Cost-Effective Conservation Potentials for Florida.
123. Expert Testimony: Docket 920260-TL, (1993). Before the Florida Public Service Commission. On the Behalf of the Florida Public Service Commission Staff. Company analyzed: BellSouth Communications, Inc. Issues: Telephone Demand Forecasts and Empirical Estimates of the Price Elasticity of Demand for Telecommunication Services.
124. Expert Testimony: Docket 920188-TL, (1992). Before the Florida Public Service Commission. On the Behalf of the Florida Public Service Commission Staff. Company analyzed: GTE-Florida. Issues: Telephone Demand Forecasts and Empirical Estimates of the Price Elasticity of Demand for Telecommunication Services.

REFEREE AND EDITORIAL APPOINTMENTS

Contributor, 2014-Current, *Wall Street Journal*, *Journal Reports*, *Energy*

Editorial Board Member, 2015-Current, *Utilities Policy*

Referee, 2014-Current, *Utilities Policy*

Referee, 2010-Current, *Economics of Energy & Environmental Policy*

Referee, 1995-Current, *Energy Journal*

Contributing Editor, 2000-2005, *Oil, Gas and Energy Quarterly*

Referee, 2005, *Energy Policy*

Referee, 2004, *Southern Economic Journal*

Referee, 2002, *Resource & Energy Economics*

Committee Member, IAEE/USAEE Student Paper Scholarship Award Committee, 2003

PROPOSAL TECHNICAL REVIEWER

California Energy Commission, Public Interest Energy Research (PIER) Program (1999).

PROFESSIONAL ASSOCIATIONS

American Economic Association, American Statistical Association, Southern Economic Association, Western Economic Association, International Association of Energy Economists ("IAEE"), United States Association of Energy Economics ("USAEE"), the National Association for Business Economics ("NABE"), and the Energy Bar Association.

HONORS AND AWARDS

National Association of Regulatory Utility Commissioners (NARUC). Best Paper Award for papers published in the *Journal of Applied Regulation* (2004).

Baton Rouge Business Report, Selected as "Top 40 Under 40" (2003).

Omicron Delta Epsilon (1992-Current).

Interstate Oil and Gas Compact Commission (IOGCC) "Best Practice" Award for Research on the Economic Impact of Oil and Gas Activities on State Leases for the Louisiana Department of Natural Resources (2003).

Distinguished Research Award, Academy of Legal, Ethical and Regulatory Issues, Allied Academics (2002).

Florida Public Service Commission, Staff Excellence Award for Assistance in the Analysis of Local Exchange Competition Legislation (1995).

TEACHING EXPERIENCE

Energy and the Environment (Survey Course)

Principles of Microeconomic Theory

Principles of Macroeconomic Theory

Lecturer, Environmental Management and Permitting. Lecture in Natural Gas Industry, LNG and Markets.

Lecturer, Electric Power Industry Environmental Issues, Field Course on Energy and the Environment. (Dept. of Environmental Studies).

Lecturer, Electric Power Industry Trends, Principles Course in Power Engineering (Dept. of Electric Engineering).

Lecturer, LSU Honors College, Senior Course on "Society and the Coast."

Continuing Education. Electric Power Industry Restructuring for Energy Professionals.

"The Gulf Coast Energy Situation: Outlook for Production and Consumption." Educational Course and Lecture Prepared for the Foundation for American Communications and the Society for Professional Journalists, New Orleans, LA, December 2, 2004

"The Impact of Hurricane Katrina on Louisiana's Energy Infrastructure and National Energy Markets." Educational Course and Lecture Prepared for the Foundation for American Communications and the Society for Professional Journalists, Houston, TX, September 13, 2005.

"Forecasting for Regulators: Current Issues and Trends in the Use of Forecasts, Statistical, and Empirical Analyses in Energy Regulation." Instructional Course for State Regulatory Commission Staff. Institute of Public Utilities, Kellogg Center, Michigan State University. July 8-9, 2010.

"Regulatory and Ratemaking Issues with Cost and Revenue Trackers." Michigan State University, Institute of Public Utilities. Advanced Regulatory Studies Program. September 29, 2010.

"Demand Modeling and Forecasting for Regulators." Michigan State University, Institute of Public Utilities. Advanced Regulatory Studies Program. September 30, 2010.

"Demand Modeling and Forecasting for Regulators." Michigan State University, Institute of Public Utilities, Forecasting Workshop, Charleston, SC. March 7-9, 2011.

"Regulatory and Cost Recovery Approaches for Smart Grid Applications." Michigan State University, Institute of Public Utilities, Smart Grid Workshop for Regulators. Charleston, SC. March 7-11, 2011.

"Regulatory and Ratemaking Issues Associated with Cost and Expense Adjustment Mechanisms." Michigan State University, Institute of Public Utilities, Advanced Regulatory Studies Program. Lansing, Michigan. September 28, 2011.

"Utility Incentives, Decoupling, and Renewable Energy Programs." Michigan State University, Institute of Public Utilities, Advanced Regulatory Studies Program. Lansing, Michigan. September 29, 2011.

"Regulatory and Cost Recovery Approaches for Smart Grid Applications." Michigan State University, Institute of Public Utilities, Smart Grid Workshop for Regulators. Charleston, SC. March 6-8, 2012.

"Traditional and Incentive Ratemaking Workshop." New Mexico Public Utilities Commission Staff. Santa Fe, NM October 18, 2012.

"Traditional and Incentive Ratemaking Workshop." New Jersey Board of Public Utilities Staff. Newark, NJ. March 1, 2013.

THESIS/DISSERTATIONS COMMITTEES

Active:

2 Thesis Committee Memberships (Environmental Studies)

1 Ph.D. Dissertation Committee (Economics)

Completed:

6 Thesis Committee Memberships (Environmental Studies, Geography)

4 Doctoral Committee Memberships (Information Systems & Decision Sciences, Agricultural and Resource Economics, Economics, Education and Workforce Development).

2 Doctoral Examination Committee Membership (Information Systems & Decision Sciences, Education and Workforce Development)

1 Senior Honors Thesis (Journalism, Loyola University)

LSU SERVICE AND COMMITTEE MEMBERSHIPS

Chairman, LSU Energy Initiative/LSU Energy Council (2014-Current).

Co-Director & Steering Committee Member, LSU Coastal Marine Institute (2009-2014).

CES Promotion Committee, Division of Radiation Safety (2006).

Search Committee Chair (2006), Research Associate 4 Position.

Search Committee Member (2005), Research Associate 4 Position.

Search Committee Member (2005), CES Communications Manager.

LSU Graduate Research Faculty, Associate Member (1997-2004); Full Member (2004-2010); Affiliate Member with Full Directional Rights (2011-2014); Full Member (2014-current).

LSU Faculty Senate (2003-2006).

Conference Coordinator. (2005-Current) Center for Energy Studies Conference on Alternative Energy.

LSU CES/SCE Public Art Selection Committee (2003-2005).

Conference Coordinator. Center for Energy Studies Annual Energy Conference/Summit. (2003-Current).

Conference Coordinator. Center for Energy Studies Seminar Series on Electric Utility Restructuring and Wholesale Competition. (1996-2003).

Co-Chairman, Review Committee, Louisiana Port Construction and Development Priority Program Rules and Regulations, On Behalf of the LSU Ports and Waterways Institute. (1997).

LSU Main Campus Cogeneration/Turbine Project, (1999-2000).

LSU InterCollege Environmental Cooperative. (1999-2001).

LSU Faculty Senate Committee on Public Relations (1997-1999).

LSU Faculty Senate Committee on Student Retention and Recruitment (1999-2003).

PROFESSIONAL SERVICE

Program Committee Member (2015). Gulf Coast Power Association Workshop/Special Briefing. "Gulf Coast Disaster Readiness: A Past, Present and Future Look at Power and Industry Readiness in MISO South."

Advisor (2008). National Association of Regulatory Utility Commissioners ("NARUC"). Study Committee on the Impact of Executive Drilling Moratoria on Federal Lands.

Steering Committee Member, Louisiana Representative (2008-Current). Southeast Agriculture & Forestry Energy Resources Alliance. Southern Policies Growth Board.

Advisor (2007-Current). National Association of State Utility Consumer Advocates ("NASUCA"), Natural Gas Committee.

Program Committee Chairman (2007-2008). U.S. Association of Energy Economics ("USAEE") Annual Conference, New Orleans, LA

Finance Committee Chairman (2007-2008). USAEE Annual Conference, New Orleans, LA

Committee Member (2006), International Association for Energy Economics ("IAEE") Nominating Committee.

Founding President (2005-2007) Louisiana Chapter, USAEE.

Secretary (2001) Houston Chapter, USAEE.

Advisor, Louisiana LNG Buyers/Developers Summit, Office of the Governor/Louisiana Department of Economic Development/Louisiana Department of Natural Resources, and Greater New Orleans, Inc. (2004).

SCHEDULE DED-1

Elizabethtown Gas Estimated Share of Acquisition Premium

	Formula	Estimated Share at 10 Percent	Estimated Share at 20 Percent
(a) AGL Resources Assets Ending December 31, 2014 (000)		\$ 14,888,000	\$ 14,888,000
(b) Elizabethtown Gas Assets Ending December 31, 2014 (000)		\$ 1,096,513	\$ 1,096,513
(c) Percent of ETG Assets to AGL Assets	(b / a)	7.365%	7.365%
(d) Purchase Share Price		\$ 66.00	\$ 66.00
(e) Average 20 Day Close Price Ending August 21, 2015		\$ 48.42	\$ 48.42
(f) Share Price Premium Percentage	((d - e) / e)	36%	36%
(g) Number of Issued and Outstanding Shares		120,000,000	120,000,000
(h) Purchase Premium \$	(d * g) - (e * g)	\$ 2,109,288,335	\$ 2,109,288,335
(i) Estimated Share of Premium	(c * h)	\$ 155,350,758	\$ 155,350,758
(j) Premium Shared with Ratepayers		10%	20%
(k) Ratepayer Credit	(i * j)	\$ 15,535,076	\$ 31,070,152
(l) Elizabethtown Gas Customers		281,095	281,095
(m) Recommended Credit Per Customer	(k / l)	\$ 55.27	\$ 110.53

	Joint Petitioners' Proposed Rate Credit
(n) Joint Petitioners' Proposed AMA Credit	\$ 6,000,000
(o) Joint Petitioners' Proposed Credit Per Customer	\$ 21.35