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BEFORE THE ARIZONA CORPORATI

COMMISSIONERS

- BOB STUMP - Chairman
- GARY PIERCE
- BRENDA BURNS
- BOB BURNS
- SUSAN BITTER SMITH

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AZ CORP COMMISSION
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2013 JUL 3 AM 10 07

IN THE MATTER OF THE APPLICATION OF
ARIZONA ELECTRIC POWER COOPERATIVE,
INC. FOR A HEARING TO DETERMINE THE
FAIR VALUE OF ITS PROPERTY FOR
RATEMAKING PURPOSES, TO FIX A JUST AND
REASONABLE RETURN THEREON AND TO
APPROVE RATES DESIGNED TO DEVELOP
SUCH RETURN.

DOCKET NO. E-01773A-12-0305

STAFF'S NOTICE OF FILING
SURREBUTTAL TESTIMONY

The Utilities Division ("Staff") of the Arizona Corporation Commission ("Commission") hereby submits the Surrebuttal Testimony of Staff witnesses Randall Vickroy, Donald T. Spangenberg, Jr., Dennis M. Kalbarczyk and Richard Mazzini in the above-referenced matter.

RESPECTFULLY SUBMITTED this 3rd day of July, 2013.

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Arizona Corporation Commission

DOCKETED

JUL 03 2013

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3rd day of July, 2013 with:

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BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. E-01773A-12-0305
THE ARIZONA ELECTRIC POWER)
COOPERATIVE, INC. FOR A HEARING TO)
DETERMINE THE FAIR VALUE OF ITS)
PROPERTY FOR RATEMAKING PURPOSES,)
TO FIX A JUST AND REASONABLE RETURN)
THEREON AND TO APPROVE RATES)
DESIGNED TO DEVELOP SUCH RETURN)
_____)

SURREBUTTAL
TESTIMONY
(COST OF CAPITAL)
OF
RANDALL VICKROY
(CONSULTANT)
ON BEHALF OF THE STAFF OF THE
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

JULY 3, 2013

1 **Q. Have you submitted Direct Testimony in this matter?**

2 A. Yes, I did. My direct testimony provided a review, evaluation, and recommendations
3 addressing cost of capital issues for the Arizona Electric Power Cooperative, Inc.
4 (“AEPCO” or “Cooperative”) rate filing, as summarized in the Cooperative's Schedules
5 A-1 and A-2 for the test year ended December 31, 2011, as adjusted. Cost of capital
6 issues included the cost of debt, business risk factors as they affect the cost of capital,
7 financial coverage ratios such as Times Interest Earned Ratio (“TIER”) and Debt Service
8 Coverage (“DSC”), equity ratios, and rating agency cash flow metrics and indicators. I
9 also discussed my evaluation of whether AEPCO’s cost of capital request provides
10 adequate margins and debt coverage in light of business risks facing the Cooperative.
11

12 **Q. What is the purpose of your surrebuttal testimony related to cost of capital?**

13 A. The purpose of this surrebuttal testimony related to the cost of capital portion of the
14 AEPCO rebuttal testimony is to point out the significant points of the AEPCO, Mohave
15 Electric Cooperative, Inc. (“Mohave”) and Trico Electric Cooperative, Inc. (“Trico”)
16 rebuttal testimonies with which Liberty disagrees with or are inaccurate or incorrect.
17

18 **Q. Please briefly describe the most significant points included in the AEPCO cost of
19 capital rebuttal testimony with which you disagree and are inaccurate or incorrect.**

20 A. The following points are inaccurate and also inconsistent with my direct cost of capital
21 testimony, including related conclusions and recommendations.
22

23 *First*, in the AEPCO rebuttal testimony on pages 1 and 2, the Trico rebuttal testimony on
24 page 2 and the Carl Stover rebuttal testimony for Mohave on pages 7 and 8, a Debt
25 Service Coverage (“DSC”) range of 1.20 to 1.50 is represented to be “appropriate to
26 determine rate sufficiency for AEPCO,” and incorrectly represents that I agree with the
27 sufficiency of such a range. My direct testimony clearly explained that several areas of
28 AEPCO’s current risks and business environment have deteriorated dramatically recently
29 and on a going-forward basis, and require a DSC coverage of far above the 1.32 ratio that

1 was approved by the ACC in 2010. AEPCO, Trico, and Mohave each incorrectly
2 represent that AEPCO's business, environmental, and competitive risks have not
3 increased markedly from the 2010 rate case decision, which is clearly not the case, as
4 described in my direct testimony.

5
6 Second, the AEPCO cost of capital rebuttal testimony on pages 2 and 6 and Mr. Carl
7 Stover's rebuttal testimony on page 12 inaccurately represent that AEPCO's very recent
8 and currently unapproved Best Available Retrofit Technology ("BART") filing with the
9 Environmental Protection Agency ("EPA") has reduced its environmental business risks
10 to below high risk levels. Additionally, Mr. Stover criticized the Liberty testimony for an
11 "inaccurate" EPA remediation estimate of \$190 million that was provided directly by
12 AEPCO in response to data request, and also was widely reported by AEPCO in the
13 media.

14
15 In its rebuttal testimony, AEPCO noted that it has recently filed a plan with the EPA (of
16 which Liberty was belatedly informed, and has not been provided with any analysis
17 thereof) that "costs about \$30 million versus over \$200 million dollars." While this is
18 news to Liberty, there is no basis for gauging the probability of approval of the new EPA
19 alternative plan, whether it would cause operating and fuel costs to increase, whether the
20 Apache units would become more or less competitive versus combined-cycle natural gas
21 fired units that are prevalent in the regional electric market, and whether the economic
22 viability of the Apache units will be evaluated on a going-forward basis. Regardless, the
23 high levels of uncertainty and risk for AEPCO have not been reduced below the high risk
24 levels as specified in Liberty's direct testimony regarding environmental risks,
25 construction build risks, rate shock exposure risks, rate competitiveness risks and
26 economic viability risks.

27
28 Third, Mr. Stover addresses rate competitiveness risks on page 13 of his rebuttal
29 testimony, recognizing the importance of this issue with regard to AEPCO business risk.
30 As noted in the Liberty cost of capital testimony, AEPCO's rates are already higher than

1 those of others in the region. With the risk of additional environmental costs, converting
2 a major coal unit to burning natural gas with subsequent low efficiency, and probable
3 significant additional environmental production costs risk making the Apache units even
4 less competitive than they have been in the past few years.

5
6 **Fourth**, on pages 3 and 4 of the AEPCO cost of capital rebuttal testimony, AEPCO
7 suggests that one-time adjustments to financial results of about \$2.0 million in 2011 and
8 about \$4.0 in 2012 should be considered in determining future financial targeted results
9 and coverage requirements. Such one-time, non-recurring adjustments should clearly not
10 be considered in influencing AEPCO's future revenue requirements and required returns
11 and coverages.

12
13 **Fifth**, on page 5 of the AEPCO and pages 9 and 10 of the Carl Stover rebuttal
14 testimonies, it is incorrectly argued that its partial requirements contracts (under which
15 AEPCO sells almost 90 percent of its capacity and energy to its three largest members)
16 do not carry more risk than all-requirements member contracts. This is clearly incorrect.
17 Moody's credit rating criteria specifies higher risks related to member contracts that are
18 less than for full requirements. The following quote is from Moody's rating criteria
19 regarding Generation and Transportation ("G&T") member contracts:

20
21 *An assessment of the wholesale power contract allows us to identify whether the*
22 *member co-ops are required to purchase all or virtually all of their supply*
23 *requirements from the G&T co-op."*
24

25 According to the credit rating agencies, 100 percent of supply requirements purchased
26 through all-requirements contracts is evaluated as having the least risk. Each percentage
27 level below 100 percent creates increasing risk levels for the G&T. The AEPCO Partial
28 Requirement Members are purchasing increasing amounts of energy and capacity from

1 the marketplace in place of AEPCO assets and operations, reducing the relevance and
2 economics of these assets as lower levels of megawatts are produced.

3
4 **Q. Has the AEPCO, Mohave or Trico rebuttal testimony related to cost of capital**
5 **caused Liberty to change any of its positions or recommendations made earlier?**

6 A. No.

7
8 **Q. Does this conclude your surrebuttal testimony?**

9 A. Yes, it does.



BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
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THEREON AND TO APPROVE RATES)
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_____)

SURREBUTTAL

TESTIMONY

(PURCHASED POWER and FUEL ADJUSTOR CLAUSE)

OF

DONALD T. SPANGENBERG, JR.

(CONSULTANT)

ON BEHALF OF THE STAFF OF THE

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JULY 3, 2013

1 **Q. Please state your name, position and business address.**

2 A. My name is Donald T. Spangenberg, Jr. I am a senior consultant for The Liberty
3 Consulting Group (“Liberty”). My Liberty business address is: The Liberty Consulting
4 Group, 65 Main Street, P.O. Box 1237, Quentin, Pennsylvania 17083.

5
6 **Q. Have you prepared summaries of your background and qualifications?**

7 A. Yes, they are provided in Exhibit DTS-1.

8
9 **Q. Mr. Spangenberg, please describe your educational background and professional
10 experience as they relate to the subjects of this testimony.**

11 A. I am a chemical engineer with a B.S.E. from Princeton University and a master’s degree
12 in Business Administration from Stanford University.

13
14 I have been a consultant with Liberty for two decades, and serve as Liberty’s lead
15 consultant in examining fuels for electric power generation, having served as project
16 manager for most Liberty engagements in this subject area. I have over 35 years of
17 experience in the energy industry, with emphasis on utility fuel procurement and
18 management. Before my career at Liberty, I served as a utility fuel supply manager,
19 contract negotiator and administrator followed by several years as an executive with a
20 coal mining company.

21
22 **Q. Do you submit direct testimony in this matter?**

23 A. No. However, the direct testimony and Purchased Power Fuel Adjustor Clause
24 (“PPFAC”) report submitted by John Antonuk included my evaluation relating to coal
25 issues.

1 **Q. What is the purpose of your surrebuttal testimony relating to coal?**

2 A. The purpose of this surrebuttal testimony related to the coal portion of the Arizona
3 Electric Power Cooperative, Inc. ("AEPCO") rebuttal testimony is to point out the three
4 significant points of the AEPCO rebuttal testimony that are incorrect.

5
6 **Q. Please summarize these three incorrect points.**

7 A. The first point is that the AEPCO rebuttal response avoided dealing directly with the
8 Liberty conclusions and recommendations presented in the direct testimony and PPFAC
9 report of John Antonuk, which looked to positive changes for future action by AEPCO.
10 Instead, the AEPCO response focused on the past, discussing justification for prior
11 AEPCO actions.

12
13 The second point is that the AEPCO rebuttal response provided new information, and
14 reversed significant positions which AEPCO had made during the audit in its responses
15 to data requests.

16
17 AEPCO has reversed its position with respect to coal inventory management. In response
18 to questions during the audit, AEPCO stated "these spot purchases account for the
19 inventory increase during the year." AEPCO's rebuttal states the opposite, observing,
20 "these coal deliveries were not intended to and did not add to the stockpile."

21
22 The third point is that the AEPCO rebuttal response misstated facts and claimed
23 management success that we have not yet observed. For example, AEPCO reports
24 inventory management success, stating that coal inventory was at 272,000 tons at the end
25 of April 2013 (page 4 of Exhibit GEP-5). This level is no different than the inventory

1 which Liberty observed of 274,000 tons in February 2012. We concluded that AEPCO
2 needed to continue the positive inventory trend; instead it spiked again to 432,000 tons in
3 June and July 2012 (See page 18 of Audi Report). This spike is not consistent with
4 management success.

5
6 AEPCO stated that Liberty contends that AEPCO should have burned the coal in
7 question. Liberty did not make this contention, but instead said that AEPCO should
8 reevaluate the use of this coal.

9
10 **Q. Has the AEPCO rebuttal testimony related to coal caused Liberty to change any of**
11 **its positions or recommendations made earlier?**

12 A. No.

13
14 **Q. Does this conclude your surrebutal testimony?**

15 A. Yes, it does.

Donald T. Spangenberg, Jr.

Areas of Specialization

Mr. Spangenberg has over 40 years of experience in the energy industry, with emphasis on utility fuel management for power generation. Mr. Spangenberg is an experienced Project Manager on projects in the gas and electric utility industry. Mr. Spangenberg has a strong history of work in strategic-business planning and in fuels management, including supply evaluation, procurement, marketing, contract negotiation, and administration. He has led numerous fuel-management-system studies and has developed comprehensive fuel-procurement programs and contract-administration systems.

Relevant Experience

Commission-Sponsored Studies

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board through conduct of the second audit of the Fuel Adjustment Mechanism (FAM) for Nova Scotia Power, Inc.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Arizona Corporation Commission through conduct of review of Arizona Electric Power Cooperative, Inc. (AEPCO) Fuel, Purchased Power, Generation, and PPFAC Management Operations and Prudence.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board on fuel matters related to the 2011 rate application of Nova Scotia Power, Inc.

Project Manager and Senior Consultant for each of Liberty's two annual audits of the fuel adjustment clause of Entergy Mississippi, Inc. for the Mississippi Public Service Commission. The overall purpose of these audits was to ensure that fuel and purchased energy was being bought and managed in an economical and reliable manner.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board through conduct of the first audit of the Fuel Adjustment Mechanism (FAM) for Nova Scotia Power, Inc.

Assistant Project Manager and Senior Consultant for Liberty's management/performance audit and financial audit of coal procurement and management of Duke Energy Ohio for the the Public Utilities Commission of Ohio (PUCO). The overall purpose of each of these audits was to identify and evaluate the Company's policies, procedures and performance for fuel procurement,

fuel utilization, purchased power, and capacity purchases, environmental compliance, as well as the accounting treatment of all related costs.

Assistant Project Manager for Liberty's audit for the New Mexico Public Regulation Commission of Southwestern Public Service Company (SPS) that included a management review of the prudence of SPS' transactions under the Renewable Energy Credit tracker as conditionally approved by the Commission and a financial review of both revenues and expenses in order to provide an analysis of any under-recovery or over-recovery. Similarly, Liberty performed an evaluation of SPS' fuel clause process and regulations and a financial audit of fuel clause computation. In addition reviews of purchases of coal, natural gas, oil, and purchased power, power plant operations, line losses, and cost allocation and assignment were also performed.

Project Manager and Senior Consultant for Liberty's management/performance audit of natural gas procurement and management of Columbia Gas of Ohio for the PUCO.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board on development of the first ever Fuel Adjustment Mechanism (FAM) for Nova Scotia Power, Inc.

Project Manager and Senior Consultant for Liberty's management/performance audit of natural gas procurement and management of Duke Energy Ohio for the PUCO.

Project Manager and Senior Consultant for Liberty's coal procurement audit of Public Service of New Hampshire for the State of New Hampshire Public Utilities Commission.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board on fuel matters related to the 2007 rate application of Nova Scotia Power, Inc.

Project Manager and Senior Consultant for Liberty's management/performance audit of natural gas procurement and management of Dominion East Ohio Gas Company for the PUCO.

Senior Coal Consultant for Liberty's fuel and purchased power procurement audit of Arizona Public Service Company for the Arizona Corporation Commission.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board on fuel matters related to the 2006 rate application of Nova Scotia Power, Inc.

Assistant Project Manager and Senior Coal Consultant for Liberty's project to assist the Nova Scotia Utility and Review Board on fuel matters related to the 2005 rate application of Nova Scotia Power, Inc.

Project Manager and Senior Consultant for Liberty's management/performance audit of natural gas procurement and management of Cincinnati Gas and Electric Company for the PUCO.

Project Manager and Senior Consultant for Liberty's focused management audit of the fuel procurement policies and practices of Kentucky Utilities Company and Louisville Gas and Electric Company for the Kentucky Public Service Commission.

Project Manager and Senior Consultant for Liberty's management/performance audit of natural gas procurement and management of Vectren Energy Delivery of Ohio for the PUCO.

Project Manager and Senior Consultant for Liberty's natural gas procurement and supply management audit of Kentucky's five major local distribution companies for the Kentucky Public Service Commission.

Senior Consultant and Task Area leader for Liberty's audit of transmission and distribution revenue requirements of the Commonwealth Edison Company for the Illinois Commerce Commission.

Project Manager and Lead Consultant for Liberty's Management and Operations Audit of East Kentucky Power Cooperative for the Kentucky Public Service Commission.

Lead Consultant in the areas of preparation for competition in Liberty's Management and Operations Audit of the New York Power Authority for the New York State Office of the State Comptroller.

Project Manager and Lead Consultant for Liberty's review of the fuel purchasing policies, procurement models, and fuel management practices at Columbus Southern Power Company and Ohio Power Company (subsidiaries of American Electric Power Company) for the PUCO.

Project Manager for Liberty's review of the natural gas purchasing policies, procurement models, and fuel management practices at East Ohio Gas Company for the PUCO.

Project Manager and Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Cincinnati Gas & Electric Company for the PUCO.

Project Manager and Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Monongahela Power Company for the PUCO.

Senior Consultant in the area of fuels management for Liberty's management and financial audit of the management and operations of Public Service Company of New Hampshire, for the New Hampshire Public Utilities Commission.

Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices at Ohio Edison for the PUCO.

Lead Consultant for Liberty's audit of the natural-gas-purchasing and supply-management policies and practices of KN Energy, Inc. for the Wyoming Public Service Commission. Responsible for the reviews of gas-supply planning, and organization, staffing, and controls.

Lead Consultant for Liberty's review of the fuel-purchasing policies, procurement models, and fuel-management practices of the Centerior companies (Cleveland Electric Illuminating Company and Toledo Edison Company) for the PUCO.

Led Liberty's review of fuel planning, acquisition, management, transportation, and disposal as part of a comprehensive management audit of West Penn Power Company for the Pennsylvania Public Utility Commission.

Utility Strategy

Project Manager and Lead Consultant for Liberty's facilitation of strategic planning for Powder River Energy Corporation, a Wyoming electric-distribution cooperative. Project Manager for a second project aimed at improving operations and evaluating opportunities for diversification.

Project Manager and Lead Consultant for Liberty's facilitation of a meeting of participants in the Wyoming power-generation industry, for the Governor of Wyoming, with the objective of developing the basis for a strategic-energy plan for the State of Wyoming.

Project Manager and Lead Consultant for Liberty's power-marketing project for a western owner of power plants. This project included development of options for sale of electric power from the company's facilities, training in the operation of local and regional electric-power markets, and assistance with the evaluation and selection of the optimal market for this electric power.

Senior Consultant for Liberty's project for a western regional utility to explore options to ownership of its generating assets, because of expected changes in power-sales agreements. Liberty defined the components of the utility's current generation operations for comparison with alternative scenarios in the areas of power resources, ownership structures, operating entities, asset-securitization structures, and methods of gaining added operational leverage. Strategic options were structured, and the framework for comparative analysis was established to provide decision-making information for the utility's management and its board of directors.

Managed Liberty's project that assessed the effects of electric-industry restructuring on all of the members of the Colorado Independent Energy Association (CIEA). CIEA represents about 20 owners of small power-generation projects (qualifying facilities—QF—as defined under PURPA) who sell power to their local electric utility. The project involved detailed assessment of the current regional market for electric-power sales, evaluation of existing power-sales agreements, and analysis of the operations and economics of the QF facilities. The project

included a review of national electric-industry initiatives and programs, and a formal presentation of findings and strategies to CIEA's members.

Lead Consultant for Liberty's study for Colorado Springs Utilities to assist this utility in addressing the organizational impacts associated with a transition to automated meter reading (AMR). Consideration of the issues of human-resource management in conjunction with technical changes was a large part of this work. Liberty's work included a survey of the experiences and lessons learned from 25 utilities that had already experienced the transition to AMR.

Senior Consultant for Liberty's assessment of the manpower-planning and workforce-management activities of the Gas & Electric Distribution unit of Public Service Company of Colorado. Specific elements of focus included activity tracking and timekeeping as it related to workforce-management processes. This project included interviews with selected managers and concluded with a workshop involving these same individuals to identify opportunities for process improvement and develop action plans in workforce management.

Senior Consultant for Liberty's project to review the natural-gas main-extension policy of Dayton Power & Light Company and to recommend revisions to this policy to permit the company to maintain its competitiveness after the restructuring of the natural-gas industry.

Fuels Management

Project Manager and Lead Consultant for Liberty's process-improvement project for Alabama Electric Cooperative, Inc. This project included analysis of operations and development of recommendations for improvement of policies, practices, processes, and procedures in the areas of fuel management for electricity-generating stations, and operations and maintenance of the stations.

Lead Consultant for Liberty's preparation of a comprehensive set of fuel-management policies and procedures for the Fuel Department of Potomac Electric Power Company. This project included development of governing policies and the procedures for all aspects of procurement, transportation, utilization, contract administration, and inventory management of coal, oil, and natural gas as power-generation fuels.

Led a fuel procurement and management study for Missouri Public Service Company. Conducted assessment of the organizational requirements for fuel-procurement systems and procedures. Analyzed and recommended action in the following areas related to fuel management: organization, personnel, and job descriptions; fuel planning and budgeting; fuel procurement; selection of coal suppliers and carriers; coal-contracting strategy; coal sales; and reporting and information systems.

Served as Project Leader of two projects at Ohio Edison Company: an analysis of fuel-information flow and a fuel-supply organization study. Evaluated effectiveness of fuel-material

flow and associated information flow, and made recommendations to improve efficiency. Assessed capabilities of personnel. Studied organization alternatives and recommended new organization structure.

Served as co-project leader of a retrospective analysis of key fuel-procurement actions and decisions of Central Illinois Public Service Company to determine whether prior actions and decisions were reasonable. Conclusions included evaluation of contractor performance, contract administration, fuel-procurement operations and procedures, and organizational issues.

Led a fuel-management systems study for Intermountain Power. Identified fuel-management needs of a utility that had not burned coal before. Developed conceptual design of suitable system. Conducted detailed interviews with all utility departments that had dealings with the fuel function, as well as with coal suppliers and railroads. Surveyed fuel management practices of 18 other utilities.

Led a coal-contract-escalation structure and evaluation project for Missouri Public Service Company. Recommended new concepts, correlated deficiencies in existing concepts, and structured new contract language.

Legal Industry

Led Liberty's project at National Fuel Gas Distribution Corporation to develop the strategy and procedures for selection and management of outside legal counsel. This work included establishing the need for outside counsel, selection and contracting with outside counsel, and management and evaluation of the services of outside counsel.

Served as chief operating officer for two Colorado law firms with responsibility for all aspects of law-firm business management. Responsibilities included risk management, financial management, personnel management, strategic planning, marketing, and general business management and operation.

Management consultant to over 25 law firms on strategic planning, marketing, personnel management, risk management, and general business management and operation of the law firm.

Other Experience

President, Management Insight – Formed this management consulting firm providing specialized consulting to users and suppliers in the energy industry. Assisted clients in fuel-supply evaluation and procurement, fuel management and contract preparation, negotiation, and administration. Also provided general management consulting, including strategic analysis, business planning, and development of marketing programs.

Vice President, Marketing, Northern Coal Company – Responsible for development and implementation of marketing program, including sales and customer relations, market research

and planning, and contract and traffic administration for \$20-million coal subsidiary of InterNorth. Restructured the marketing department. Negotiated and administered six coal supply agreements with customers in Japan and Korea, including first agreements made by Japanese utilities with a western U.S. coal supplier.

Fuel Supply Manager, Public Service Company of Colorado – Responsible for management of energy supplies required to fuel electricity-generating stations of a \$1 billion electric and gas utility. Principal evaluator of fuel supplies and negotiator and administrator of fuel contracts for \$175 million in annual fuel purchases.

General Electric, Nuclear Division - Nuclear Field Engineer, starting up BWRs in Germany (KRB) and India (Tarapur). Also worked as a nuclear fuel sales specialist, preparing, presenting, and negotiating contracts for sale of nuclear fuel and nuclear-fuel reprocessing services to electric utilities in the U.S.

Education

M.B.A., Stanford University

B.S.E., *cum laude*, Chemical Engineering, Princeton University

Publications and Presentations

Taught numerous courses in the Colorado Continuing Legal Education program on business management and marketing of law firms. Representative course titles included: Building Your Trial Practice, Developing and Marketing Your Practice, Business Planning for Law Firms, The Competitive Lawyer, and Effective Client Development Strategies.

Wrote numerous articles for *The Colorado Lawyer*. Representative article titles included: “The Business Management Approach To Avoiding Legal Malpractice Claims,” “The Attorney’s Professional Liability Insurance Alternative,” and “Good Business Management Decreases Malpractice Exposure.”

Certified Instructor at the National Legal Resource Center. Primary course was entitled Marketing and Client Development.



BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
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SUSAN BITTER SMITH
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COOPERATIVE, INC. FOR A HEARING TO)
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THEREON AND TO APPROVE RATES)
DESIGNED TO DEVELOP SUCH RETURN)
_____)

SURREBUTTAL TESTIMONY

OF

DENNIS M. KALBARCZYK

(CONSULTANT)

ON BEHALF OF THE STAFF OF THE

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

JULY 3, 2013

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1 **I. SUMMARY**

2 **Q. Have you previously submitted testimony in this proceeding?**

3 A. Yes. I submitted direct testimony on behalf of the Arizona Corporation Commission (“ACC”
4 or “Commission”), Utilities Division (“Staff”) in the review of Arizona Electric Power
5 Cooperative Inc.’s (“AEPCO” or “Cooperative”) application for a general rate increase in
6 Docket related to both revenue requirement and rate design matters.

7
8 **Q. Please describe the major points your surrebuttal testimony will address.**

9 A. I have reviewed and will comment on the rebuttal testimony of AEPCO witness Gary E.
10 Pierson. My understanding of Mr. Pierson’s rebuttal testimony is that he accepted the
11 proposed rate base adjustments, and continues to recommend the same Cost of Service Study
12 and Rate Design approach. Mr. Pierson also stated that AEPCO withdraws its request to
13 modify the Purchased Power Fuel Adjustor Clause (“PPFAC”) to include carbon taxes and
14 Cap and Trade Allowances. He also indicated that a change was necessary to his direct
15 testimony to indicate that the proposed modification to the PPFAC to separate bank balances
16 from the fuel adjustor rates. Balances would be recovered or refunded through an
17 amortization process, a continuing six-month amortization tariff rider, rather than a
18 “temporary” rider.

19
20 Mr. Pierson proposes two new rebuttal adjustments. The first consists of a wheeling expense
21 adjustment based upon updated changes in contract rates. This adjustment would increase
22 operating expenses by \$240,000. The second item is a \$260,000 reclassification adjustment,
23 which would reduce gas cost expense and correspondingly increase administration expenses.
24 It therefore would cause no overall change in operating expenses. Thus, AEPCO’s request
25 that its as-filed proposed revenue decrease of \$4,527,467 be reduced to \$4,287,465, a
26

1 difference of \$240,000. Due to the change in revenue requirements, Mr. Pierson also
2 recommends that the as-filed proposed rates be revised accordingly. Mr. Pierson also
3 advised that updated information on rate case expense would be provided at a later date.¹
4

5 Mr. Pierson's surrebuttal testimony also raises for the first time the concept of a new adjustor
6 mechanism, which he identified as the Environmental Compliance Adjustor Rider
7 ("ECAR"). It would operate as a tariff surcharge to provide a funding mechanism for
8 Environmental Protection Agency ("EPA") requirements. The ECAR proposal in-part would
9 address matters related to pending EPA matters at the Apache station.
10

11 **Q. Please summarize the recommendations you make in this Surrebuttal Testimony.**

12 A. I provide the following summary of recommendations:

- 13 • Recommend approval of Staff's direct testimony positions that there be no
14 change in overall revenue requirement.
- 15 • Recommend approval of AEPCO's rebuttal request to increase operating
16 expenses by \$240,000 resulting in a corresponding decrease to margin based
17 upon no change in overall revenue requirement.
- 18 • Recommend no change in overall rate case expense normalization claim.
- 19 • Recommend approval of Staff's surrebuttal testimony rate design, which
20 incorporates reclassification adjustments and increased wheeling expense
21 adjustment but with no overall resultant change in total revenue requirements.
- 22 • Recommend denial of the proposed ECAR at this time. Staff recommends that
23 this matter remain open in order to conduct technical conferences and continue
24 rate case discussions to fully evaluate the ECAR mechanism. Staff would then
25 bring its final recommendation to the Commission for approval.
26
27
28
29
30
31

¹ Updated information was provided in Supplemental response to DK-1.68, dated June 21, 2013.

1 **II. REVENUE REQUIREMENT ISSUE DISCUSSION**

2 **Q. Have you reviewed AEPCO witness Pierson's rebuttal testimony and proposed**
3 **recommendations?**

4 A. Yes. Mr. Pierson, at page 8 of his rebuttal testimony notes that in order to narrow disputed
5 issues he accepts Staff's direct testimony pro forma adjustments to rate base. While Staff
6 identified operating expenses that could be reduced, no recommendations to reduce expenses
7 were made due to the magnitude of the issues addressed by Mr. Vickroy and his
8 recommendation of no change in revenue levels.

9
10 **Q. Have you reviewed AEPCO's additional rebuttal adjustments?**

11 A. Yes. The first adjustment is a net increase of \$240,000 for wheeling expenses, due to
12 increases in contract rates that occurred on October 1, 2012 and May 1, 2013. From a
13 ratemaking perspective the selection of a test year always raises concerns as one tries to
14 assure that appropriate known and measurable changes are timely incorporated into the test
15 year. In the instant case AEPCO used a historic test year ended December 31, 2011 to which
16 pro forma adjustments were made to reflect known and measurable changes. It is not
17 uncommon for the rate analyst and regulator to struggle with a determination as to which
18 items should or should not be included within the test year based upon known and
19 measurable changes especially when changes occur far outside the end of the test year.

20
21 **Q. Please continue.**

22 A. The first adjustment to Western Area Power Contract Rate Increases (Parker Davis PTP Firm
23 Transmission and Firm Network Transmission) occurred on October 1, 2012. This date is 10
24 months after the close of the test year the rate changes occurred and about one month after
25 the rate case was filed. Thus, it is reasonable to supplement the as-filed case to include the
26 rate change as well, an increase of \$76,800 when considered up through the end of 2012.
27 The Intertie Point-To-Point rate increased on May 1, 2013, an increase of \$163,200. Thus,

1 the question is whether events occurring in 2013 should be reflected in a 2011 pro forma
2 adjusted test year.

3

4 **Q. What is your overall opinion and recommendation as to the requested \$240,000 net**
5 **change in operating expenses?**

6 A. I would recommend inclusion of both rate changes, especially given that Staff's position is
7 that there be no change in revenue levels. Because revenue levels would remain unchanged,
8 the increase in operating expense would result in a minimal reduction to margin.

9

10 **Q. Do you have any other comments with regard to Mr. Pierson's second rebuttal**
11 **adjustment?**

12 A. Yes. I agree with his request to reduce fuel costs by \$260,000 and corresponding increase to
13 administrative & general expenses. This adjustment simply reconciles a misclassification
14 error, with no impact on operating expenses or overall revenue requirement. However, such
15 changes do affect rate design which I address later.

16

17 **Q. Briefly address AEPCO's proposal to recover carbon taxes, carbon dioxide ("CO₂")**
18 **Cap and Trade Allowances or similar levies through the PPFAC.**

19 A. In its application, AEPCO had proposed to recover these items through its PPFAC. My
20 direct testimony opposed this request because it was overly broad. However, AEPCO in its
21 rebuttal testimony indicated that it has decided to withdraw its request.

22

23 **Q. Does Staff accept AEPCO's request that the separate bank balance to be refunded or**
24 **collected over a six month amortization be considered as a "continuing" rather than a**
25 **"temporary" rider as discussed in Mr. Pierson's rebuttal testimony?**

26 A. Staff accepts AEPCO's request, which as explained by Mr. Pierson appears to be a minor
27 oversight.

1 **Q. Briefly explain your understanding of AEPCO's ECAR Rider proposal.**

2 A. Mr. Pierson at pages 7-8 of his rebuttal testimony, for the first time formally advances a
3 surcharge as a funding mechanism to address EPA requirements that may develop in the
4 future. While not mentioned specifically, the proposal, if adopted as submitted would
5 provide for a mechanism to fund any future changes at the Apache station due to pending
6 EPA matters. A Draft ECAR Tariff and Plan of Administration ("POA") was also provided,
7 as Exhibits 7 and 8, respectively.

8
9 The following provides a brief summary overview of the proposed ECAR mechanism:

- 10 • Initial rate would be set at zero.
- 11
- 12 • Calculated surcharge rates would be based upon specific dollars set forth in an
- 13 Environmental Compliance Strategy ("ECS") plan.
- 14
- 15 • ECS would be completed and finalized in accordance with EPA requirements and
- 16 filed with the Commission.
- 17
- 18 • Qualifying ECS costs are those costs necessary to meet mandated or expected to
- 19 be mandated by federal, state, or local laws or regulations determined as
- 20 appropriate by the Commission; determination to include provisions for review
- 21 and hearing, if necessary. Environmental fines or penalties are not recovered
- 22 through the ECAR.
- 23
- 24 • Charges would be assigned to Class A Members on the basis of the Allocated
- 25 Capacity Percentage of each respective Member.
- 26
- 27 • ECAR rates may be adjusted (up or down) depending on actual funding needs as
- 28 outlined in the ECS plan, subject to review and hearing, if necessary.
- 29 • Use of Funds, described in general to meet ECS costs requirements on a dollar-
- 30 for-dollar basis:
 - 31 ○ Qualified environmental capital additions
 - 32 ○ Support operations' expenses
 - 33 ○ Recover stranded asset costs
 - 34 ○ Environmental fines or penalties are not recovered through the ECAR.
 - 35
- 36
- 37 • Compliance Reports would be filed on semi-annual basis.
- 38
- 39

1 According to Mr. Pierson, unanimous consent of AEPCO members is required prior to filing
2 with the Commission of the ECS plan and ECAR Surcharge rate.
3

4 **Q. What is Staff's position and recommendation with regard to the proposed ECAR**
5 **mechanism?**

6 A. As noted, the ECAR mechanism was just recently filed and Staff has not had the opportunity
7 to fully explore all of the details and potential ramifications of the proposal as submitted. In
8 general, Staff is not opposed to the concept; however, there are a number of underlying
9 details which still need to be addressed. In that regard, collaborative work sessions between
10 AEPCO and Staff may be appropriate to address underlying technical concerns necessary to
11 fully implement the proposal to meet necessary regulatory review and approvals. A revised
12 POA could be filed later in this case.
13

14 In order to advance the inclusion of such an ECAR mechanism, to which the initial rate
15 would be set at zero as proposed by AEPCO, Staff would recommend that the following
16 matters first be fully addressed:
17

- 18 1. Rate to be set at "zero" until Completion of the Apache Economic Study
19 ("Study") as ordered by the Commission in the prior proceeding.
20
- 21 2. Study to fully address and quantify economic cost and rate impact of changes in
22 operating costs due to EPA requirements and other economic factors based
23 upon best business practices.
24
- 25 3. Study to fully address and quantify economic cost and rate impact of changes in
26 capital costs due to EPA requirements and other economic factors based upon
27 best business practices.
28
- 29 4. Study to fully address and quantify economic costs and rate impact of changes
30 resulting in stranded costs due to EPA requirements and/or other economic
31 factors based upon best business practices.

1 Additionally, the proposed working sessions between AEPCO and Staff should allow the
2 necessary time and opportunity for the Draft Tariff and POA to be more formally revised to
3 address regulatory review and oversight concerns. For example, the ECAR currently
4 contemplates the inclusion of all mandated or expected to be mandated environmental
5 compliance obligations by federal, state, and local agencies. The general description of the
6 agencies and lack of minimum or maximum dollar amounts subject to possible consideration
7 appears overly broad and wide reaching, and the indication that expected requirements may
8 be included prior to determination of an actual requirement.

9
10 The POA indicates that the surcharge contemplates a method for the calculation of the
11 surcharge based upon the funding requirement to remedy the EPA matter. The POA does not
12 address whether the resulting fixed charge will base revenue requirements upon short- or
13 long-term financing or simply ongoing operating cash requirements. Staff expects that
14 AEPCO would use best business practices to fund the requirements, but we are unsure what
15 that may be when one must consider the impact of such a requirement based upon each
16 Member's individual economic circumstances.

17
18 In addition, the accounting section of the POA briefly describes regulatory accounting
19 concepts for the recording of funds received and classification of qualified environmental
20 assets. Staff understands the conceptual nature of the discussion; however, a more
21 formalized process and list of respective accounts to be used needs to be identified to aid in
22 the review and oversight process. Finally, while the ECAR provides for compliance review
23 and frequency of reporting requirements, it does not appear that there is a provision requiring
24 that the ECAR remain subject to audit by the Commission on an annual or bi-annual basis.

1 **III. RECOMMENDED RATE DESIGN**

2 **Q. Please describe your understanding of AEPCO'S rebuttal rate design position.**

3 A. Mr. Pierson agrees with Staff's proposal to accept AEPCO's cost of service study and rate
4 design approach. Thus, there is no disagreement in approach; however, ultimate rates will be
5 based upon the adjusted revenue requirement approved by the Commission. In that regard, I
6 have updated the fully allocated cost of service study using AEPCO's cost of service study
7 methods, which incorporates the revenue requirement at the same levels produced under
8 current rates. I also included the \$791,000 increase to Production Fuel Account 501 and
9 corresponding decrease to Production Fuel Account 547 reclassification adjustment noted on
10 page 15 of Mr. Pierson's rebuttal testimony. This adjustment has a zero impact on revenue
11 requirement, but does affect rate design.

12
13 DMK Exhibit 1 provides Staff's Surrebuttal proposed rates, including a proof of revenue
14 analysis by rate class. This exhibit demonstrates that Staff's proposed rates will produce
15 approximately the same \$154,924,873 of revenue requirement from members as provided for
16 under current rates. It is revenue neutral or with no overall net change to current revenue
17 requirements. However, current rates to members will change, because the cost of service
18 study will allocate the total revenue requirement based upon more current cost causative
19 allocation factors developed in this test period as compared to when rates were set in the prior
20 rate case proceeding.

21 **Q. Does that conclude your surrebuttal testimony?**

22 A. Yes, it does.

Surrebutal Testimony of Dennis Kalbarczyk
Docket No. E-01773A-12-0305
Exhibit DMK-1

Arizona Electric Power Cooperative, Inc.
SUMMARY PROOF OF REVENUE - COST OF SERVICE / CHANGES IN REPRESENTATIVE RATES
CURRENT vs. AEP CO REBUTTAL and STAFF SURREBUTTAL PROPOSED

	<u>Current</u>	<u>AEP CO Rebuttal</u>		<u>Staff Surrebuttal</u>	
		<u>Proposed</u>	<u>% Change</u>	<u>Proposed</u>	<u>% Change</u>
Collective All-Requirements					
Fixed Charge	\$ 273,334	\$ 280,682	2.69%	\$ 318,671	16.59%
O&M Charge	\$ 414,019	\$ 462,845	11.79%	\$ 462,842	11.79%
Energy Rates					
Base Resources \$/kWh	\$ 0.03132	\$ 0.02958	-5.56%	\$ 0.02946	-5.93%
Other Resources \$/kWh	\$ 0.05300	\$ 0.03904	-26.34%	\$ 0.04119	-22.29%
PPFAC-Base Resources Base \$/kWh	\$ 0.03513	\$ 0.02958	-15.80%	\$ 0.02946	-16.13%
PPFAC-Other Resources Base \$/kWh	\$ 0.07188	\$ 0.03904	-45.69%	\$ 0.04119	-42.70%
PPFAC-Fixed Fuel Cost per month	\$ -	\$ 183,236		\$ 183,236	
Revenues	\$ 16,903,587	\$ 16,630,822	-1.61%	\$ 17,106,439	1.20%
\$ Increase		\$ (272,765)		\$ 202,852	
Partial-Requirements Members:					
Mohave Electric Cooperative					
Fixed Charge	\$ 835,756	\$ 856,617	2.50%	\$ 972,557	16.37%
O&M Charge (Present \$/kW)	\$ 1,274,882	\$ 1,433,723	12.46%	\$ 1,433,715	12.46%
Energy Rates					
Base Resources \$/kWh	\$ 0.03191	\$ 0.02931	-8.15%	\$ 0.02919	-8.51%
Other Resources \$/kWh	\$ 0.05852	\$ 0.04118	-29.63%	\$ 0.04436	-24.20%
PPFAC-Base Resources Base \$/kWh	\$ 0.03454	\$ 0.02931	-15.14%	\$ 0.02919	-15.48%
PPFAC-Other Resources Base \$/kWh	\$ 0.06191	\$ 0.04118	-33.48%	\$ 0.04436	-28.35%
PPFAC-Fixed Fuel Cost per month	\$ -	\$ 549,433		\$ 549,433	
Revenues	\$ 50,184,760	\$ 47,374,155	-5.60%	\$ 48,686,609	-2.99%
\$ Increase		\$ (2,810,605)		\$ (1,498,151)	
Sulphur Springs Valley					
Fixed Charge	\$ 740,041	\$ 758,513	2.50%	\$ 861,175	16.37%
O&M Charge (Present \$/kW)	\$ 1,128,876	\$ 1,269,525	12.46%	\$ 1,269,518	12.46%
Energy Rates					
Base Resources \$/kWh	\$ 0.03205	\$ 0.02975	-7.18%	\$ 0.02963	-7.54%
Other Resources \$/kWh	\$ 0.05742	\$ 0.04139	-27.92%	\$ 0.04373	-23.85%
PPFAC-Base Resources Base \$/kWh	\$ 0.03449	\$ 0.02975	-13.74%	\$ 0.02963	-14.08%
PPFAC-Other Resources Base \$/kWh	\$ 0.06449	\$ 0.04139	-35.82%	\$ 0.04373	-32.20%
PPFAC-Fixed Fuel Cost per month	\$ -	\$ 486,509		\$ 486,509	
Revenues	\$ 47,411,111	\$ 45,736,988	-3.53%	\$ 46,885,038	-1.11%
\$ Increase		\$ (1,674,123)		\$ (526,073)	
Trico Electric Cooperative					
Fixed Charge	\$ 710,367	\$ 743,980	4.73%	\$ 844,676	18.91%
O&M Charge (Present \$/kW)	\$ 764,465	\$ 868,482	13.61%	\$ 868,478	13.61%
Energy Rates					
Base Resources \$/kWh	\$ 0.03214	\$ 0.02984	-7.16%	\$ 0.02972	-7.53%
Other Resources \$/kWh	\$ 0.05747	\$ 0.03747	-34.80%	\$ 0.03861	-32.82%
PPFAC-Base Resources Base \$/kWh	\$ 0.03431	\$ 0.02984	-13.03%	\$ 0.02972	-13.37%
PPFAC-Other Resources Base \$/kWh	\$ 0.08274	\$ 0.03747	-54.71%	\$ 0.02972	-64.08%
PPFAC-Fixed Fuel Cost per month	\$ -	\$ 574,197		\$ 574,197	
Revenues	\$ 40,425,415	\$ 40,895,440	1.16%	\$ 42,246,784	4.51%
\$ Increase		\$ 470,025		\$ 1,821,369	
PRM Totals	\$ 138,021,286	\$ 134,006,583	-2.91%	\$ 137,818,432	-0.15%
Total CARM and PRM	\$154,924,873	\$150,637,405	-2.77%	\$154,924,871	0.00%
\$ Increase		\$ (4,287,468)		\$ (2)	



BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. E-01773A-12-0305
THE ARIZONA ELECTRIC POWER)
COOPERATIVE, INC. FOR A HEARING TO)
DETERMINE THE FAIR VALUE OF ITS)
PROPERTY FOR RATEMAKING PURPOSES,)
TO FIX A JUST AND REASONABLE RETURN)
THEREON AND TO APPROVE RATES)
DESIGNED TO DEVELOP SUCH RETURN)

SURREBUTTAL
TESTIMONY
(ENGINEERING ANALYSIS)
OF
RICHARD MAZZINI
(CONSULTANT)
ON BEHALF OF THE STAFF OF THE
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

JULY 3, 2013

1 **Q. Mr. Mazzini, have you filed direct testimony in this case?**

2 A. Yes, I prepared an engineering analysis focused on the Apache generating plant and
3 offered testimony on my findings and conclusions. Arizona Electric Power Cooperative,
4 Inc. ("AEPCO") submitted rebuttal testimony featuring a document titled "AEPCO's
5 Response to the Final Report of Richard Mazzini", dated June 13, 2013. AEPCO's
6 response correctly characterizes Liberty's findings that (1) the future of the Apache
7 Station is in question and (2) AEPCO has been less than diligent in its planning efforts.
8 AEPCO disagrees.

9

10 **Q. Has AEPCO's rebuttal testimony caused you to modify your thinking?**

11 A. No. The AEPCO response is inaccurate and insufficient in addressing Liberty's
12 concerns. The findings, conclusions, and recommendations of the Liberty report remain
13 valid.

14

15 **Q. AEPCO asserts "the substantive and procedural elements of the study
16 recommended by Mr. Mazzini are already in place." Is this correct?**

17 A. No. AEPCO has not addressed the fundamental economic questions raised in 2009.

18

19 **Q. AEPCO challenges Liberty's characterization of a "downward spiral" in terms of
20 the output of Apache Units ST2 and ST3. Is AEPCO's analysis correct?**

21 A. The output from ST2 and ST3 has declined substantially. AEPCO mischaracterizes
22 Liberty's conclusion. "The Final Report implies that from 2000 to 2009, Apache Station
23 suffered from a long-term erosive condition producing a continuous decline in output for
24 nine straight years." AEPCO also refers to "Mr. Mazzini's implication of a steady nine-
25 year spiral." Both statements are wrong and do not represent Liberty's conclusions.

26

27 Please refer to Exhibit RAM-1, which appeared in varying forms in both the 2010 and
28 2013 Liberty reports. The chart clearly shows that the decline in Apache output started in
29 2007, not 2000, and Liberty never claimed otherwise.

30

1 **Q. AEPCO claims that “when considered year-by-year, it is clear that the decline [in**
2 **Apache output between 2009 and 2012] was not a trend but the result of several**
3 **isolated factors that no longer exist.” Is this accurate?**

4 A. Liberty believes that the information in RAM-1 fully supports a conclusion that output is
5 indeed trending downward. AEPCO dismisses this, and blames “isolated factors that no
6 longer exist.” AEPCO then, however, describes these factors as market prices for
7 electricity and gas prices as well as changes in member market purchases. Liberty finds
8 such factors neither isolated nor no longer existing.

9
10 **Q. AEPCO believes that the recent performance of Apache is its “most compelling**
11 **evidence” disproving your analysis. Please explain your opinion in this regard.**

12 A. The notion that a few months of performance invalidate an analysis based on six years of
13 decline is difficult to accept. Moreover, it seems that even this small claim of
14 improvement by AEPCO is not well founded. Exhibit RAM-2, which is based on the
15 most recent data published and plotted by SNL, does not support AEPCO’s claim that in
16 recent months performance has improved, and AEPCO offers no data of its own to
17 demonstrate its point. Circumstances appear to reflect business as usual.

18
19 **Q. AEPCO supports its “dramatic turnaround” assertion with “expectations**
20 **concerning production from these units into the near future.” Is there a basis for**
21 **such a claim?**

22 A. AEPCO has not provided a reasonable basis for such a claim. A thorough analysis of
23 such production expectations, based on realistic economic assumptions, is precisely what
24 Liberty has suggested AEPCO provide. The support provided with the rebuttal (coal
25 purchase assumptions) is far from an economic analysis.

1 **Q. AEPCO insists that Apache ST1 (CC1) is indeed used and useful, largely on the**
2 **basis of its capacity value. Has Liberty adequately considered the capacity value of**
3 **this unit?**

4 A. Liberty has on several occasions sought a definitive and quantitative explanation of how
5 this unit has value as capacity. AEPCO has not quantified this value, which lead to
6 Liberty's conclusion. AEPCO offers only qualitative attributes for the unit and does not
7 address whether those attributes have a tangible dollar value and, if so, whether those
8 same attributes might be available in the market at lower costs. In the continuing absence
9 of such data, Liberty is forced to conclude that the tangible value is likely to be negative,
10 that the capacity attributes are indeed available in the market at lower costs, and that
11 hence ST1 (CC1) is no longer used and useful.

12
13 **Q. AEPCO testifies that its contracts require it to maintain CC1 as a viable resource**
14 **through 2020. Does this suggest that Liberty's "used and useful" concerns are**
15 **irrelevant?**

16 A. AEPCO's implication that any lack of usefulness is moot because of its contractual
17 obligations is not sound. First, customers would presumably relieve AEPCO of this
18 responsibility if lower cost options were available. Second, it is not clear that the unit
19 does indeed qualify as a "viable resource" at this point, so the contract obligation itself
20 may be moot.

21
22 **Q. Is there merit to AEPCO's assertion that CC1 is "valuable and cost-effective".**

23 A. Such statements carry little weight when not quantified. With AEPCO unable to define
24 "capacity value" in a tangible economic way, and the continuing reality that the units
25 have no energy value, as evidenced by their failure to run for the last two years, we find
26 the AEPCO rebuttal unconvincing.

1 **Q. How do the pending EPA threats impact Liberty's conclusions and**
2 **recommendation?**

3 A. Section 4 of AEPCO's rebuttal presents its plans and actions for dealing with
4 environmental issues. Although the current environmental concerns will influence the
5 future of ST2 and ST3, they were not presented by Liberty as the primary threat. In fact,
6 in the 2009 study, the current EPA threats did not exist.

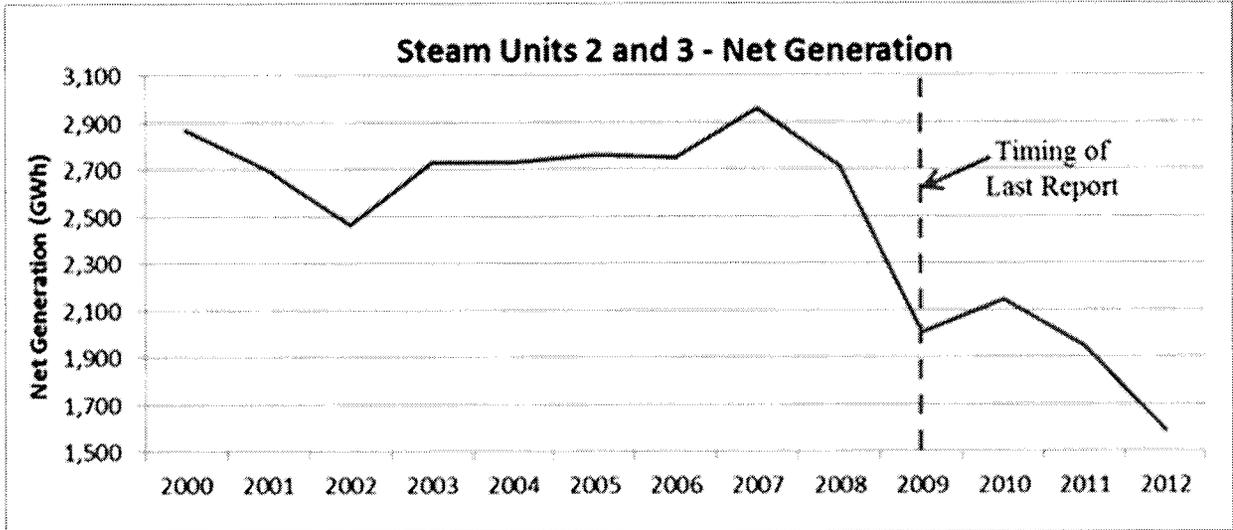
7
8 Liberty's concerns are economic, and any eventual resolution of Apache's environmental
9 issue will further damage its economics. AEPCO is pleased that its proposals to the EPA
10 decrease the necessary investment to the tens of millions versus initial estimates in the
11 hundreds. This misses the point. Liberty's economic concerns are valid even if no new
12 investments are required, and any such new requirements can only make matters worse.

13
14 **Q. Has the AEPCO, Mohave or Trico rebuttal testimony related to the Engineering**
15 **Analysis caused Liberty to change any of its previous positions or recommendation?**

16 A. No.

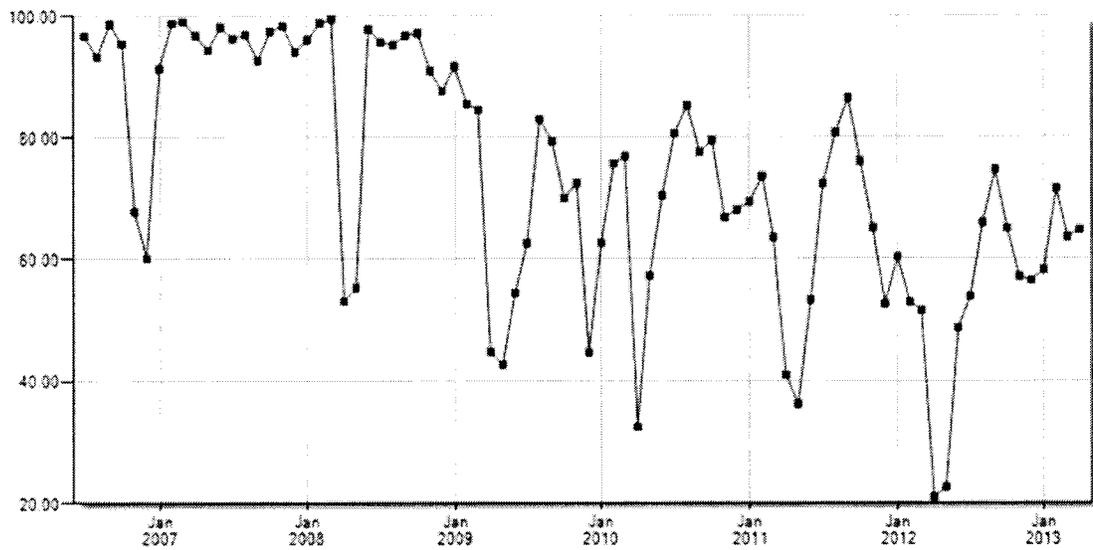
17
18 **Q. Does that conclude your surrebuttal testimony?**

19 A. Yes, it does.

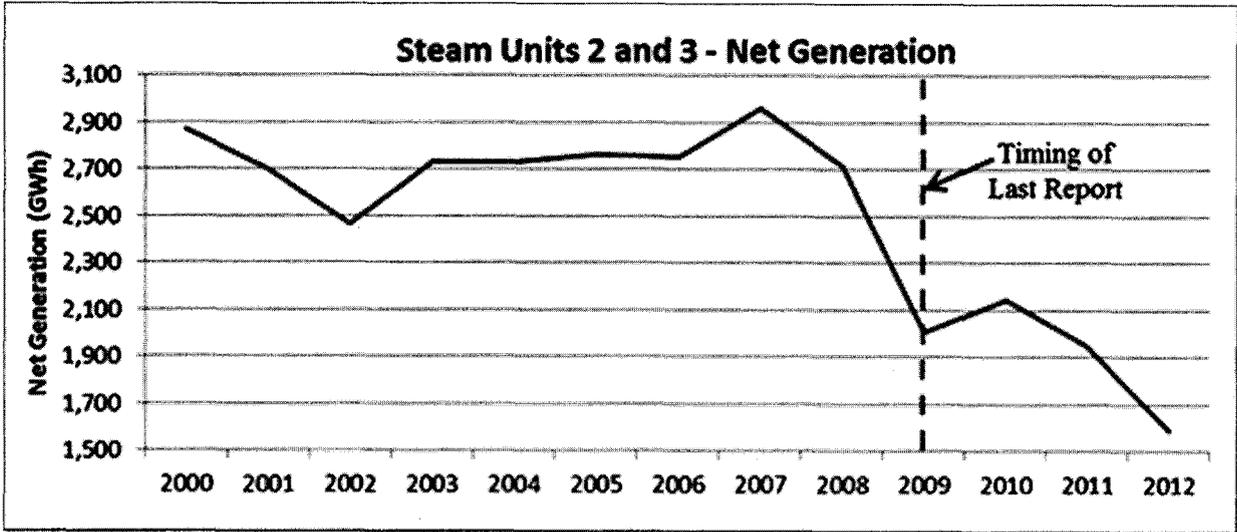


Liberty's prior report updated by RM-1.118

Monthly Capacity Factor
Units 2 and 3 Combined

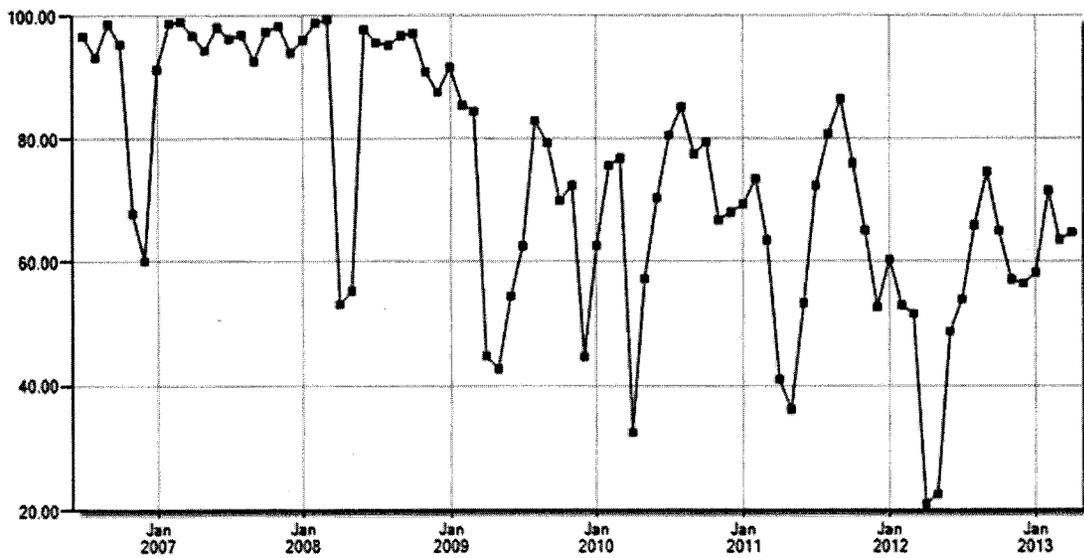


Source: SNL



Liberty's prior report updated by RM-1.118

Monthly Capacity Factor
Units 2 and 3 Combined



Source: SNL