

ORIGINAL



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BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

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MARC SPITZER, Chairman
WILLIAM A. MUNDELL, Commissioner
JEFF HATCH-MILLER, Commissioner
MIKE GLEASON, Commissioner
KRISTIN K. MAYES, Commissioner

2004 JUN 14 P 3: 28
AZ CORP COMMISSION
DOCUMENT CONTROL

IN THE MATTER OF COMPETITION
IN THE PROVISION OF ELECTRIC
SERVICES THROUGHOUT THE
STATE OF ARIZONA

DOCKET NO. RE-00000C-94-0165

IN THE MATTER OF THE STRANDED
COST FILING AND REQUEST FOR A
WAIVER OF CERTAIN PORTIONS OF
THE RULES FILED BY TRICO
ELECTRIC COOPERATIVE, INC.

DOCKET NO. E-01461A-98-0466

IN THE MATTER OF THE STRANDED
COST FILING AND REQUEST FOR A
WAIVER OF CERTAIN PORTIONS OF
THE RULES FILED BY MOHAVE
ELECTRIC COOPERATIVE, INC.

DOCKET NO. E-01750A-98-0467

IN THE MATTER OF THE STRANDED
COST FILING AND REQUEST FOR A
WAIVER OF CERTAIN PORTIONS OF
THE RULES FILED BY GRAHAM
COUNTY ELECTRIC COOPERATIVE,
INC.

DOCKET NO. E-01749A-98-0468

IN THE MATTER OF THE STRANDED
COST FILING AND REQUEST FOR A
WAIVER OF CERTAIN PORTIONS OF
THE RULES FILED BY DUNCAN
VALLEY ELECTRIC COOPERATIVE,
INC.

DOCKET NO. E-01703A-98-0469

IN THE MATTER OF THE STRANDED
COST FILING AND REQUEST FOR A
WAIVER OF CERTAIN PORTIONS OF
THE RULES FILED BY SULPHUR
SPRINGS VALLEY ELECTRIC
COOPERATIVE, INC.

DOCKET NO. E-01575A-98-0472

Arizona Corporation Commission

DOCKETED

JUN 14 2004

DOCKETED BY

NOTICE OF FILING MEMORANDUM OF *AMICI CURIAE* AND
SUPPORTING ADDENDUM

SACKS TIERNEY P.A., LAWYERS
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FOURTH FLOOR
SCOTTSDALE, ARIZONA 85251-3693

SACKS TIERNEY P.A., LAWYERS
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1 Please take notice that intervenors Constellation NewEnergy, Inc. and Strategic
2 Energy, L.L.C. have filed in the docket in these cases a copy of the Memorandum of
3 *Amici Curiae* Constellation New Energy, Inc. and Strategic Energy, L.L.C. In
4 Opposition to Petition for Review filed in Matter No. CV-04-0148-PR in the Supreme
5 Court of Arizona on June 4, 2004 and a copy of Appendix to the Memorandum filed
6 with the Supreme Court in the same matter. These documents were referenced at the
7 oral argument before Administrative Law Judge Rodda on June 11, 2004 and copies of
8 the documents were given to Judge Rodda and Commissioner Gleason at that time.
9 Copies were also made available to counsel who appeared at the hearing. In the
10 Appendix, Tab 6 has been corrected to include page 76 of the Texas Report on the
11 Scope of Competition in Electric Markets in Texas.

12 RESPECTFULLY SUBMITTED this 14th day of June, 2004.

13 SACKS TIERNEY P.A.

14 By 

15 Marvin S. Cohen
16 Charlene Gibson Robertson
17 4250 North Drinkwater Boulevard, Fourth Floor
18 Scottsdale, Arizona 85251-3647
19 Attorneys for Constellation NewEnergy, Inc. and
20 Strategic Energy, L.L.C.

21 ORIGINAL AND ²⁹~~23~~ COPIES OF THE
22 FOREGOING HAND-DELIVERED
this 14th day of June, 2004, to:

23 Arizona Corporation Commission
24 Docket Control Division
25 1200 W. Washington Street
26 Phoenix, Arizona 85007
27
28

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1 COPY OF THE FOREGOING
MAILED this 14th day of
2 June, 2004, to:

3 MARC SPITZER, Chairman
Arizona Corporation Commission
4 1200 West Washington Street
Phoenix, Arizona 85007
5

6 WILLIAM A. MUNDELL, Commissioner
Arizona Corporation Commission
1200 West Washington Street
7 Phoenix, Arizona 85007

8 JEFF HATCH-MILLER, Commissioner
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9 1200 West Washington Street
Phoenix, Arizona 85007
10

11 MIKE GLEASON, Commissioner
Arizona Corporation Commission
1200 West Washington Street
12 Phoenix, Arizona 85007

13 KRISTIN K. MAYES, Commissioner
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1200 West Washington Street
14 Phoenix, Arizona 85007
15

16 Jane L. Rodda
Administrative Law Judge
Hearing Division
17 Arizona Corporation Commission
1200 West Washington Street
18 Phoenix, Arizona 85007

19 Ernest G. Johnson, Director of Utilities
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20 Arizona Corporation Commission
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23 Janet Wagner, Attorney
Legal Division
24 Arizona Corporation Commission
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2 MAILED this 14th day of
3 June, 2004, to:

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9 Climax Metals Company; ASARCO
10 Incorporated; Cyprus Climax Metals
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12 Choice and Competition**

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26 Electric Cooperative, Inc.**

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35 2575 East Camelback Road
36 Phoenix, Arizona 85016-9225
37 **Attorneys for Arizona Electric Power
38 Cooperative, Inc.; Duncan Valley Electric
39 Cooperative, Inc.; and Graham County
40 Electric Cooperative, Inc.**

41 Jeffery B. Guldner
42 Snell & Wilmer
43 One Arizona Center
44 400 East Van Buren Street
45 Phoenix, Arizona 85004-2202
46 **Attorneys for Arizona Public Service
47 Company**

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Telephone: (480) 425-2600

Attorneys for Constellation NewEnergy, Inc. and Strategic Energy, L.L.C.

**IN THE SUPREME COURT
STATE OF ARIZONA**

PHELPS DODGE CORPORATION,
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
CORPORATION and formerly known
as CYPRUS SIERRITA
CORPORATION and formerly known
as CYPRUS BAGDAD COPPER
CORPORATION and formerly known
as CYPRUS MINERAL PARK
CORPORATION; AJO
IMPROVEMENT COMPANY;
MORENCI WATER & ELECTRIC
COMPANY; ASARCO
INCORPORATED; ARIZONA
MINING ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES
and ARIZONANS FOR ELECTRIC
CHOICE AND COMPETITION
(collectively AECC),

Intervenors-Appellants,
Cross Appellees,

RESIDENTIAL UTILITY
CONSUMER OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State
of Arizona,

Defendant-Appellant,
Cross Appellee,

Supreme Court
No. CV-04-0148-PR

Court of Appeals
No. 1 CA-CV 01-0068

MARICOPA COUNTY
Superior Court
No. CV 1997-003748

**CONSTELLATION
NEWENERGY, INC. AND
STRATEGIC ENERGY,
L.L.C.'S NOTICE OF ERRATA**

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.; DUNCAN
VALLEY ELECTRIC
COOPERATIVE, INC.; GRAHAM
COUNTY ELECTRIC
COOPERATIVE, INC.; SULPHUR
SPRINGS VALLEY ELECTRIC
COOPERATIVE, INC.; and TRICO
ELECTRIC COOPERATIVE, INC.

Plaintiff-Appellees,
Cross Appellants

ARIZONA CONSUMERS COUNCIL,

Plaintiff
Cross Appellant

NOTICE IS HEREBY GIVEN that Constellation NewEnergy, Inc. and Strategic Energy, L.L.C. inadvertently omitted page 2 of Attachment 6 to the Appendix to Memorandum of Amici Curiae filed with the Court on June 4, 2004. A copy of page 2 is appended hereto for the convenience of the Court.

DATED this 11th day of June, 2004.

SACKS TIERNEY P.A.

By 
Marvin S. Cohen
Charlene Gibson Robertson
Attorneys for Constellation
NewEnergy, Inc. and Strategic
Energy, L.L.C.

ORIGINAL and 6 COPIES
filed with Supreme Court Clerk and COPIES
mailed this 11 day of June, 2004, to:

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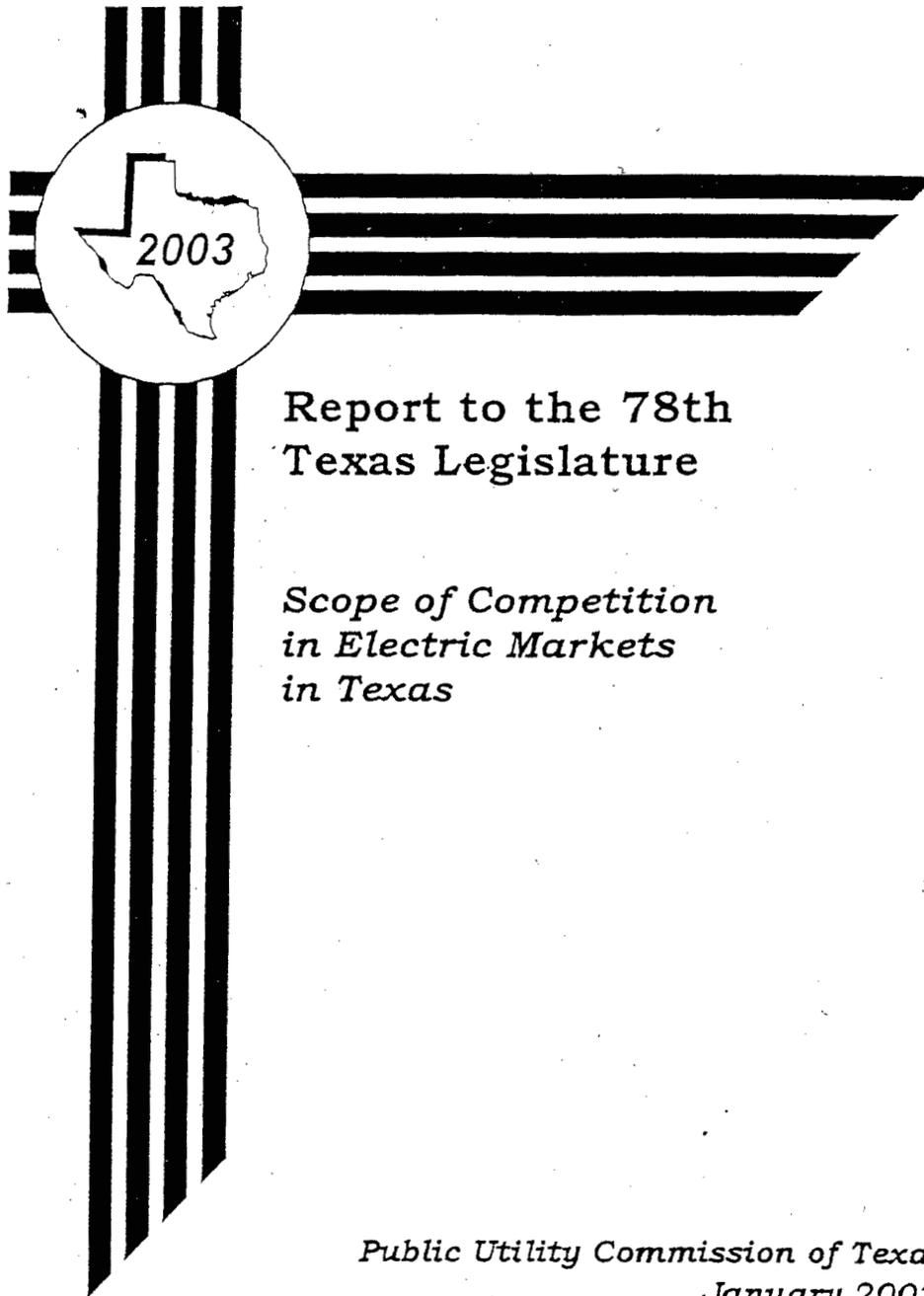
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[537903/CO302-00002]



Report to the 78th
Texas Legislature

*Scope of Competition
in Electric Markets
in Texas*

*Public Utility Commission of Texas
January 2003*

IV. EFFECTS OF COMPETITION ON RATES AND SERVICE

At this early stage, competitive forces appear to be working to bring many competitors to the retail market, encourage thousands of customers to choose a new provider, and reduce the electricity rates paid by consumers in Texas. In total, there are over 25 active REPs operating in the Texas market, and all classes of customers have a number of REPs offering service.

Since the ERCOT market transitioned to a single control area on July 31, 2001, daily wholesale power prices in ERCOT have remained reasonable, in both the bilateral and ancillary services markets. Temporary price spikes in August 2001 appear to be related to transmission congestion that occurred on these days, as well as market participants learning the new procedures of the ERCOT market after the transition to a single control area.

Retail customers in Texas are paying significantly less for electricity in 2002 as compared to the regulated rates in effect in 2001. Residential customers saved approximately \$900 million in 2002 compared to regulated rates in 2001. Low-income residential customers have received an additional \$68 million in discounts, or an average reduction of \$136 per customer, through the end of October.

Residential customers have the opportunity to save even more by choosing another electric provider. As of December 2002, additional savings off the price to beat of up to 14% were available to residential customers.

Through August of 2002, commercial customers have saved, in total, approximately \$420 million compared to rates in effect in 2001. Industrial customers appear to have saved at least \$225 million compared to rates in effect in 2001.

Another way customers have been able to save money is by aggregating their energy load and negotiating with REPs as one buying unit. Eighteen different aggregation groups, including schools, and municipal and county electric customers, report estimated savings of approximately \$123 million compared to the price to beat and over \$134 million compared to rates the customers paid in 2001.

Customers in all customer classes have taken advantage of the opportunities available to them to switch providers. As of September 2002, over 400,000 retail customers were taking service from REPs not affiliated with their local transmission and distribution utility. Over 6% of residential customers were served by a non-affiliated REP, while 9% of small commercial, and over 16% of larger commercial and industrial customers receiving service from a non-affiliated REP in September 2002. For customers without a price to beat available from the affiliated REP, both the competitive REPs and the affiliated REPs can offer competitive rates. As of September 2002, over 85% of these customers have negotiated a competitive contract with either the affiliated REP, or another REP.

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RECEIVED

JUN - 4 2004

CLERK SUPREME COURT

Attorneys for Constellation NewEnergy, Inc. and Strategic Energy, L.L.C.

IN THE SUPREME COURT
STATE OF ARIZONA

PHELPS DODGE CORPORATION,
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
CORPORATION and formerly known
as CYPRUS SIERRITA
CORPORATION and formerly known
as CYPRUS BAGDAD COPPER
CORPORATION and formerly known
as CYPRUS MINERAL PARK
CORPORATION; AJO
IMPROVEMENT COMPANY;
MORENCI WATER & ELECTRIC
COMPANY; ASARCO
INCORPORATED; ARIZONA
MINING ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES
and ARIZONANS FOR ELECTRIC
CHOICE AND COMPETITION
(collectively AECC),

Intervenors-Appellants,
Cross Appellees,

RESIDENTIAL UTILITY
CONSUMER OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State
of Arizona,

Defendant-Appellant,
Cross Appellee,

Supreme Court

No. ~~CV-01-0263-PR~~
CV04-0148PR

Court of Appeals

No. 1 CA-CV 01-0068

MARICOPA COUNTY

Superior Court

No. CV 1997-003748

CONSTELLATION
NEWENERGY, INC. AND
STRATEGIC ENERGY,
L.L.C.'S MOTION TO
PARTICIPATE AS AMICI
CURIAE IN OPPOSITION TO
PETITION FOR REVIEW

DATED this 4th day of June, 2004.

SACKS TIERNEY P.A.

By 
Marvin S. Cohen
Charlene Gibson Robertson
Attorneys for Constellation
NewEnergy, Inc. and Strategic
Energy, L.L.C.

MEMORANDUM OF POINTS AND AUTHORITIES

Constellation and Strategic Energy are electric service providers ("ESPs") selling retail electric service in Texas, California, Massachusetts, Pennsylvania, Ohio and other states. Constellation is the successor in interest to NEV Southwest, L.L.C., the holder of a certificate of convenience and necessity ("CCN") granted by the Arizona Corporation Commission ("Commission") on or about April 21, 1999. Constellation plans to offer competitive retail electric service in Arizona. Strategic Energy plans to offer competitive retail electric service in Arizona and to obtain a CCN for that purpose from the Commission. In furtherance of their intent to provide retail electric service in Arizona, Constellation and Strategic Energy have intervened and are participating in the current Arizona Public Service ("APS") Rate Case before the Commission. (Docket No. E-01345A-03-0437).

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.; DUNCAN
VALLEY ELECTRIC
COOPERATIVE, INC.; GRAHAM
COUNTY ELECTRIC
COOPERATIVE, INC.; SULPHUR
SPRINGS VALLEY ELECTRIC
COOPERATIVE, INC.; and TRICO
ELECTRIC COOPERATIVE, INC.

Plaintiff-Appellees,
Cross Appellants

ARIZONA CONSUMERS COUNCIL,

Plaintiff
Cross Appellant

Pursuant to Rule 16 and Rule 23 (k) of the Arizona Rules of Civil Procedure, Constellation NewEnergy, Inc. (“Constellation”) and Strategic Energy, L.L.C. (“Strategic Energy”), through the undersigned counsel, respectfully request permission to participate in this matter as *amici curiae* and to file a memorandum in opposition to the Petition for Review filed May 4, 2004 by Plaintiff-Appellee, Cross Appellant Trico Electric Cooperative (“Trico”). Specifically, Constellation and Strategic request permission to file the “Memorandum of *Amici Curiae* Constellation NewEnergy and Strategic Energy In Opposition to Petitions For Review” in the form lodged simultaneously with this motion. This Motion is supported by the attached Memorandum of Points and Authorities, the attached affidavits of Mona Tierney and Jennifer Chamberlin, and the entire record before the Court in this case.

While the Court of Appeals decision below vacated certain rules and decisions of the Commission, it upheld the right of the Arizona Corporation Commission to allow ESPs to offer retail electric service within the territory of an electric utility holding a CCN. The decision also recognized that the Commission could determine a just and reasonable range of rates that can be charged by an ESP and is not limited to setting just one rate. The decision holds that any property rights that might be conferred under Article 15 Section 7 of the Arizona Constitution to Trico and other cooperatives by a CCN protect only their right to construct and operate lines to transmit and distribute electricity. In essence, the decision allows implementation of the retail competition for the provision of electricity called for in Arizona Revised Statutes §40-202.B. Trico is seeking to overturn the decision and prohibit such competition. If the decision is overturned on the grounds asserted by Trico, Constellation and Strategic will not be able to offer retail electric service in Arizona.

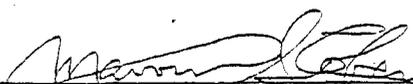
No ESPs are parties in this case. Constellation and Strategic seek the opportunity to file a Memorandum in Opposition to Trico's Petition for Review so that the Supreme Court will have the benefit of receiving for its consideration the perspective of electric service providers who are perhaps the entities most seriously affected by the outcome of the case, but who have not been before the Court as parties.

Constellation and Strategic have reviewed the Petition for Review filed by Trico. Constellation and Strategic submit that their unique perspective on the issues raised in the Petition for Review would benefit the Court in reaching its decision. The attached Memorandum, which Constellation and Strategic seek permission to file as *amici curiae*, offers additional insights on the issues presented. These issues are of significant concern to all potential providers of competitive electric services throughout the state.

Constellation and Strategic respectfully request that the Court grant their Motion to Participate as *Amici Curiae* and decline review of the issues set forth in the Petition for Review by Trico. Alternatively, if the Court chooses to accept review, Constellation and Strategic urge the Court to affirm the decision of the Court of Appeals.

RESPECTFULLY SUBMITTED this 4th day of June, 2004.

SACKS TIERNEY P.A.

By 
Marvin S. Cohen
Charlene Gibson Robertson
Attorneys for Constellation
NewEnergy, Inc. and Strategic
Energy, L.L.C.

ORIGINAL and 6 COPIES
filed with Supreme Court Clerk and COPIES
mailed this 4~~th~~ day of June, 2004, to:

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IN THE COURT OF APPEALS
STATE OF ARIZONA
DIVISION ONE

No. 1 CA-CV 01-0068

AFFIDAVIT OF JENNIFER
CHAMBERLIN

PHELPS DODGE CORPORATION;
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
CORPORATION and formerly known as
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and formerly known as CYPRUS
BAGDAD COPPER CORPORATION
and formerly known as CYPRUS
MINERAL PARK CORPORATION; AJO
IMPROVEMENT COMPANY;
MORENCI WATER & ELECTRIC
COMPANY; ASARCO
INCORPORATED; ARIZONA MINING
ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES and
ARIZONANS FOR ELECTRIC CHOICE
AND COMPETITION (collectively
AECC),

Intervenors-Appellants,
Cross-Appellees,

RESIDENTIAL UTILITY CONSUMER
OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State of
Arizona,

Defendant-Appellant,
Cross-Appellee,

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.; DUNCAN
VALLEY ELECTRIC COOPERATIVE,
INC.; GRAHAM COUNTY ELECTRIC
COOPERATIVE, INC.; SULPHUR
SPRINGS VALLEY ELECTRIC

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Dally L. Lubin

[535112v3/CO302-00003]

1 COOPERATIVE, INC.; and TRICO
2 ELECTRIC COOPERATIVE, INC.

3 Plaintiff-Appellees
4 Cross-Appellants,

5 ARIZONA CONSUMERS COUNCIL,

6 Plaintiff
7 Cross-Appellant.

8
9 STATE OF California }
10 County of Contra Costa } ss:
11

12 I, Jennifer Chamberlin, being first duly sworn, upon my oath, hereby testify as
13 follows under penalty of perjury:

14 1. I am the Manager of Regulatory Affairs for Strategic Energy, L.L.C.
15 ("Strategic").

16 2. Strategic is an energy management company that provides electric load
17 aggregation and power supply coordination services. Founded in 1986, Strategic has
18 transformed itself from an energy-consulting firm into one of the largest competitive retail
19 energy service providers in the United States. Strategic now has more than 42,000
20 commercial and industrial customers in states that have enacted retail choice, including
21 Pennsylvania, Ohio, New York, Massachusetts, Texas, and California—with many more
22 states expected to come online in the next few years. More than 170 full-time energy
23 professionals at its headquarters in Pittsburgh, Pennsylvania and in offices across the
24 country are devoted to objective electricity and natural gas management and consulting.

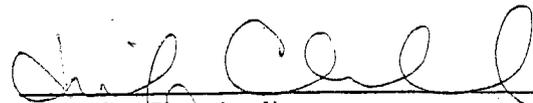
25 3. Strategic procures and manages more than \$2 billion of electricity and natural
26 gas per year and has never had a customer interrupted.

SACKS TIERNEY P.A., LAWYERS
4260 NORTH DRINKWATER BOULEVARD
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SCOTTSDALE, ARIZONA 85251-3893

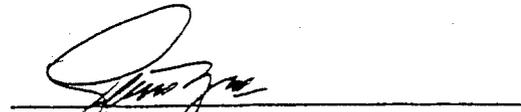
1 4. Strategic Energy is preparing and plans to file with the Arizona Corporation
2 Commission ("Commission") an application for a CCN to supply competitive services as
3 an ESP in Arizona.

4 5. Strategic has intervened in the current Arizona Public Service ("APS") rate
5 case before the Commission (Docket No. E-01345A-03-0437) and is fully participating in
6 the case because it wants to preserve retail competition in Arizona, enter the Arizona retail
7 electric market and offer competitive retail electric service to customers now served by
8 APS.

9
10 FURTHER AFFIANT SAYETH NAUGHT.

11
12 
13 Jennifer Chamberlin

14 SUBSCRIBED AND SWORN TO before me this 18th day of May, 2004, by
15 Jennifer Chamberlin.

16
17 
18 Notary Public

19 My Commission Expires:

20 03/02/08



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IN THE COURT OF APPEALS
STATE OF ARIZONA
DIVISION ONE

No. 1 CA-CV 01-0068

AFFIDAVIT OF MONA TIERNEY

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AND COMPETITION (collectively
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Intervenors-Appellants,
Cross-Appellees,

RESIDENTIAL UTILITY CONSUMER
OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State of
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Cross-Appellee,

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INC.; GRAHAM COUNTY ELECTRIC
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SPRINGS VALLEY ELECTRIC

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4260 NORTH DRINKWATER BOULEVARD
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SCOTTSDALE, ARIZONA 85261-3693

1 COOPERATIVE, INC.; and TRICO
2 ELECTRIC COOPERATIVE, INC.

3 Plaintiff-Appellees
4 Cross-Appellants,

5 ARIZONA CONSUMERS COUNCIL,

6 Plaintiff
7 Cross-Appellant.

8
9 STATE OF California }
10 County of Contra Costa } ss:
11

12 I, Mona Tierney, being been first duly sworn, upon my oath, hereby testify as
13 follows under penalty of perjury:

14 1. I am the Director of Government Affairs for Constellation NewEnergy, Inc.
15 ("Constellation").

16 2. Constellation is the nation's leading competitive retail electric service provider
17 ("ESP") serving commercial and industrial customers in California, Texas, Illinois, Ohio,
18 Pennsylvania, Maryland, Delaware, New Jersey, New York, Massachusetts, Rhode Island,
19 New Hampshire, and Maine.

20 3. Constellation is a wholly owned subsidiary of the Constellation Energy Group
21 (NYSE: CEG), a leading global power company comprised of competitive generation,
22 distribution, and retail businesses around the world. Constellation offers energy products
23 and services including both electricity and natural gas. The company also provides
24 customized solutions to achieve additional control and savings through energy efficiency,
25 load management, and other specialized services. Constellation customers currently
26 represent more than 8,000 megawatts of peak electric load and more than 250 billion cubic
27 feet of annual natural gas consumption.

SACKS TIERNEY P.A. LAWYERS
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FOURTH FLOOR
SCOTTSDALE, ARIZONA 85261-3693

1 4. On or about April 21, 1999, the Arizona Corporation Commission ("Commission")
2 granted NEV Southwest, L.L.C.'s application for a Certificate of Convenience and
3 Necessity ("CCN") to supply competitive services as an ESP in Arizona. Constellation is a
4 successor in interest to this CCN.

5 5. Constellation has intervened in the current Arizona Public Service ("APS") rate case
6 before the Commission (Docket No. E-01345A-03-0437) and is fully participating in the
7 case because it wants to preserve retail competition in Arizona, enter the Arizona retail
8 electric market and offer competitive retail electric service to customers now served by
9 APS.

10 FURTHER AFFIANT SAYETH NAUGHT.

11
12 Mona Tierney
13 Mona Tierney
14

15 SUBSCRIBED AND SWORN TO before me this 19 day of May, 2004, by Mona
16 Tierney.



Tracey L. Marquit
Notary Public

20 My Commission Expires:

21 December 11, 2007
22
23
24
25
26
27
28

SUPREME COURT OF ARIZONA

PHELPS DODGE CORPORATION,
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
CORPORATION and formerly known as
CYPRUS SIERRITA CORPORATION and
formerly known as CYPRUS BAGDAD
COPPER CORPORATION and formerly
known as CYPRUS MINERAL PARK
CORPORATION; AJO IMPROVEMENT
COMPANY; MORENCI WATER &
ELECTRIC COMPANY; ASARCO
INCORPORATED; ARIZONA MINING
ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES and
ARIZONANS FOR ELECTRIC CHOICE
AND COMPETITION (collectively AECC),

Intervenors-Appellants,
Cross Appellees,

RESIDENTIAL UTILITY CONSUMER
OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State of
Arizona,

Defendant-Appellant,
Cross Appellee,

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.; DUNCAN
VALLEY ELECTRIC COOPERATIVE,
INC.; GRAHAM COUNTY ELECTRIC
COOPERATIVE, INC.; SULPHUR
SPRINGS VALLEY ELECTRIC
COOPERATIVE, INC.; and TRICO
ELECTRIC COOPERATIVE, INC.

Plaintiff-Appellees,
Cross Appellants,

ARIZONA CONSUMERS COUNCIL,

Plaintiff,
Cross Appellant.

Supreme Court
No. CV-01-0263-PR

Court of Appeals
No. 1CA-CV 01-0068

MARICOPA COUNTY
Superior Court
No. CV 1997-003748

**MEMORANDUM OF *AMICI*
CURIAE CONSTELLATION
NEW ENERGY, INC. AND
STRATEGIC ENERGY, L.L.C.,
IN OPPOSITION TO PETITION
FOR REVIEW**

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INTRODUCTION

Pursuant to Rules 16 and 23(k) of the Arizona Rules of Civil Appellate Procedure, Constellation NewEnergy, Inc. (“Constellation”) and Strategic Energy, L.L.C. (“Strategic”) submit this Memorandum as *amici curiae* in Opposition to the Petition for Review filed by Plaintiff-Appellee, Cross Appellant Trico Electric Cooperative, Inc. (“Trico”).

Constellation and Strategic ask that the Court deny review or, alternatively, affirm the decision of the Court of Appeals.

CONSTELLATION AND STRATEGIC

Constellation is a large competitive retail electric service provider (“ESP”) serving commercial and industrial customers in California, Texas, Illinois, Ohio, Pennsylvania, Maryland, Michigan, New Jersey, New York, Massachusetts, Rhode Island, New Hampshire, and Maine. Constellation is a wholly owned subsidiary of the Constellation Energy Group (NYSE: CEG), a large global power company comprised of competitive generation, distribution, and retail businesses around the world. Constellation offers energy products and services including both electricity and natural gas. The company also provides customized solutions to achieve additional control and savings through energy efficiency, load management, and other specialized services. Constellation

customers currently represent more than 8,000 megawatts of peak electric load and more than 250 billion cubic feet of annual natural gas consumption.

On or about April 21, 1999, the Arizona Corporation Commission (“Commission”) granted NEV Southwest, L.L.C.’s application for a Certificate of Convenience and Necessity (“CCN”) to supply competitive services as an ESP in Arizona. Constellation is a successor in interest to this CCN. Constellation is planning to offer competitive retail electric service in Arizona.¹

Strategic is an energy management company that provides electric load aggregation and power supply coordination services. Founded in 1986, Strategic is one of the largest competitive retail energy service providers in the United States. Strategic has more than 42,000 commercial and industrial customers in states that have enacted retail choice, including Pennsylvania, Ohio, New York, Massachusetts, Texas, and California—with more states expected to come online in the next few years. It employs more than 170 full-time energy professionals at its headquarters in Pittsburgh, Pennsylvania and in offices across the country. Strategic procures and manages more than \$2 billion of electricity and natural gas per year and has never had a customer interrupted.

¹ Affidavit of Mona Tierney, ¶¶ 2 through 4, copy submitted in Appendix as Attachment 1; original filed with Motion to Participate as *Amici Curiae* in Opposition to Petition for Review.

Strategic is preparing and plans to file with the Commission an application for a CCN to supply competitive services as an ESP in Arizona.²

Constellation and Strategic have intervened in the current Arizona Public Service ("APS") rate case before the Commission (Docket No. E-01345A-03-0437) and are fully participating in the case because they want to preserve retail competition in Arizona, enter the Arizona retail electric market and offer competitive retail electric service to customers in the state.³

THE RESTRUCTURING OF THE ELECTRIC INDUSTRY.

The electric industry generally consists of three functional elements: generating facilities that produce the electricity, transmission facilities that carry the power to communities, and distribution facilities that deliver the power to customers. The transmission and distribution facilities are generally considered to be natural monopolies, but the generating facilities can compete against one another if they have access to transmission facilities to deliver their products. Prior to 1992, the general pattern in the electric industry was for one company in an area to be vertically integrated, that is, to own the production, transmission and

² Affidavit of Jennifer Chamberlin, ¶¶ 2 through 4, copy submitted in Appendix as Attachment 2; original filed with Motion to Participate as *Amici Curiae* in Opposition to Petition for Review.

³ Tierney and Chamberlin Affidavits, ¶ 5.

distribution facilities needed to serve its customers.⁴ The provision of electricity by investor owned utilities was fully regulated as to both price and quality of service. In 1992, federal legislation required open access to transmission networks and allowed the independent owners of electric generating facilities to deliver their energy through these networks. Since 1994, states have been changing their laws to allow competition in the provision of generating services.⁵ By the end of 2003, competitive retailers were serving over 52,000 MW in the United States.⁶ For comparison, the Arizona Public Service load in 2001 was about 5,700 MW.⁷ A January 2003 Report to the 78th Texas Legislature by the Public Utility Commission of Texas estimates that, compared to rates in effect in 2001, Texas residential, commercial and industrial electric customers saved close

⁴ There were some exceptions with regard to municipalities and cooperatives which tended to own distribution, and possibly transmission, facilities and bought their power at wholesale from companies owning generating facilities.

⁵ SALLY HUNT, *MAKING COMPETITION WORK IN ELECTRICITY* (John Wiley & Sons) (2002), pages 1-5, submitted in Appendix as Attachment 3.

⁶ KEMA Press Release dated January 29, 2004, *Competitive Retail Power Markets Advance Rapidly in 2003, Surpass 50,000 Megawatt Mark*, <http://ragtime.xenergy.com/xenhome.nsf/htmldocs/1_about?>, submitted in Appendix as Attachment 4.

⁷ December 31, 2001, FERC Form No. 1 Annual Report of Major Electric Utilities, Licensees and Others, Arizona Public Service Co., at 401, submitted in Appendix as Attachment 5.

to \$1.7 billion in 2002 because of retail competition.⁸ The Center for the Advancement of Energy Markets, a non-profit think tank, issued a study in September 2003 that estimated more than \$3 billion in savings for electric consumers in 2002 in the Mid-Atlantic region—Pennsylvania, Maryland, Delaware, New Jersey and the District of Columbia.⁹ The Department of Defense estimates that between 1999 and 2002, it saved \$36 million in costs of electricity by buying in competitive markets¹⁰

**COMPETITION IN THE PROVISION OF ELECTRIC GENERATING
SERVICES IS ARIZONA PUBLIC POLICY**

In December 1996, the Commission adopted rules establishing a framework for the introduction of retail electric competition in Arizona. Arizona Administrative Code (“A.A.C.”) R14-2-1601, *et seq.* Under these rules,

⁸ *Scope of Competition in Electric Markets in Texas*, Report to the 78th Texas Legislature, Public Utility Commission of Texas, January 2003, page 76, submitted in Appendix as Attachment 6.

⁹ Dr. Ronald J. Sutherland, *Estimating the Benefits of Restructuring Electricity Markets: An Application to the PJM Region*, Center for the Advancement of Energy Markets, (September 2003), and related press release <<http://www.caem.org/website/pages/PJM.htm>>, submitted in Appendix as Attachment 7.

electricity generation, metering and billing would become competitive; customers could choose to obtain these services from ESPs. Distribution and transmission remained noncompetitive.

In 1998, the Arizona Legislature enacted H.B. 2663, Laws 1998, Ch. 209 that established electric power competition as the public policy of the state. The Act amended Titles 10, 30 and 40 of the Arizona Revised Statutes to provide in Title 10 for electric cooperatives to participate in competition with other entities in the electric energy market (A.R.S. § 10-257.4), to provide in Title 30 the rules for electric competition involving public power entities (A.R.S. § 30-801 et seq.), and to provide in Title 40 for a transition by regulated electric public service corporations to competition for electric generation service (A.R.S. §§ 40-202—209.) A.R.S. § 40-202.B was amended to read, in pertinent part: “It is the public policy of this state that a competitive market shall exist in the sale of electric generation service....” In Section 35 of the 1998 Act, the legislative intent of the Act was stated, in pertinent part, as follows:

The legislature intends by this act to promote and protect the interests of retail electric power customers and the state as a whole by moving from the regulatory framework for delivery of electric generation to a

¹⁰ Defense Energy Support Center Fact Book 2002, page 58, <<http://www.desc.dla.mil/DCM/Files/fact02>>, submitted in Appendix as Attachment 8.

framework under which competition is allowed in the sale of electricity to retail customers. Furthermore, it is in the public interest for the legislature to establish policies for the state to ensure an orderly transition to a competitive market in the retail sale of electricity that should allow citizens of this state and businesses operating in this state to achieve the economic benefits from industry restructuring....

Both the Arizona Corporation Commission and the Arizona Legislature, the two institutions with plenary power over the subject, have clearly and unequivocally established as public policy that consumers in Arizona should have the choice of alternative suppliers of electric generating services in a competitive system.

TRICO HAS NO CREDIBLE BASIS FOR ITS PETITION--THE COURT OF APPEALS DECISION WAS CORRECT.

Trico contends that, notwithstanding the actions of the Commission and the Legislature establishing competition in the provision of electric generating services as the public policy of Arizona, this Court should abolish competition and re-instate regulated monopolies for the provision of these services. In support of this contention, they claim to have an exclusive right to sell electricity in their certificated areas; they also claim that the Commission cannot authorize a range of rates but must establish the specific rates to be charged. These arguments have previously been presented to this Court and have been unequivocally rejected.

In *US West Communications, Inc. v. Ariz. Corp. Commn.*, 197 Ariz. 16, 3 P.3d 936 (App. 1999) (“*US West I*”) the Court of Appeals ruled specifically that the nature of the relationship between a regulated public service corporation and the Commission is not contractual. This Court denied a petition for review from that decision. Last year this Court had occasion to directly review a claim, in another context, that a contract had been created by statute. *Proksa v. Arizona State School for the Deaf and the Blind*, 205 Ariz. 627, 74 P.3d 939 (2003). There former employees of the Arizona State Schools for the Deaf and Blind asserted that they had contract rights and property rights in their continued employment under A.R.S. § 15-1326 prior to its amendment in 1993 and that their termination in 2002 violated those rights. This Court rejected that argument relying, in part, on *US West I*, and citing with approval *National R.R. Passenger Corp. v. Atchison, Topeka & Santa Fe Ry. Co.*, 470 U.S. 451, 465-66, 84 L. Ed. 2d 432, 105 S. Ct. 1441 (1985), the same case on which the Court of Appeals had relied in *US West I*. With regard to the claimed property right, this Court in *Proksa* quoted with approval from *Gattis v. Gravett*, 806 F.2d 778, 781: “The legislature which creates a property interest may rescind it...whether the interest is an entitlement to economic benefits, a statutory cause of action or civil service job protection.” 74 P.2d at 944. In establishing competition in the provision of

electric generating service as the public policy of the state, the Arizona Legislature and the Commission clearly rescinded any entitlement to the economic benefits of monopoly that public service utilities may have previously held with regard to the sale of electric generating services. The law is settled in Arizona that Trico had no contractual relationship with the state resulting from its CCN and has no property right to exclusivity in its sales of electric generation. There is no reason to change this law.

With regard to the Commission's power to establish a range of rates, it was clearly established in *US West v. Arizona Corporation Commission*, 201 Ariz. 242, 34 P.3d 351 (2001) ("*US West II*"), that the Commission has such power. There it was asserted, as Trico here asserts, that the Commission is constitutionally obligated to set rates for public service corporations on the basis of a fair value rate base.¹¹ While this Court determined that, in the context of telecommunications, the Arizona Constitution requires a determination of the fair value of every competitive local exchange carrier ("*CLEC*")¹², the Court went on to hold that the Commission has considerable latitude and discretion in its use of

¹¹ There the telecommunications industry was involved, but the provisions of the Arizona Constitution at issue apply equally to all public service corporations – those providing telecommunications service as well as those providing electric services. Ariz. Const. Art. 15 §§ 2, 3, 13.

the fair value determination for purposes of rate making. In so holding, the Court observed as follows:

But while the constitution clearly requires the Arizona Corporation Commission to perform a fair value determination, [*246] [**355] only our jurisprudence dictates that this finding be plugged into a rigid formula as part of the rate-setting process. Neither section 3 nor section 14 of the constitution requires the corporation commission to use fair value as the exclusive "rate basis."....

As we have seen, a line of cases nearly as old as the state itself has sustained the traditional formulaic approach. The commission and the CLECs correctly point out, however, that those decisions were rendered during a time of monopolistic utility markets. In such a setting, where rates were determined by giving the utility a reasonable return on its Arizona property, the fair value requirement was essential.

We still believe that when a monopoly exists, the rate-of-return method is proper. Today, however, we must consider our case law interpreting the constitution against a backdrop of competition. In such a climate, there is no reason to rigidly link the fair value determination to the establishment of rates. We agree that our previous cases establishing fair value as the exclusive rate base are inappropriate for application in a competitive environment.

34 P.3d at 355. (Emphasis supplied).

In its Petition, Section II D, Trico contends that Article 15, § 3 of the Arizona Constitution does not permit the Commission to set a range of rates. In making this assertion, Trico totally ignores the above-quoted holdings in *US West*

¹² A CLEC is the telephone industry equivalent of an ESP in the power

II; it makes no attempt to distinguish this case from *US West II* and offers no basis for this Court to overturn that decision.

CONCLUSION

The Court of Appeals opinion is based on recent decisions of this Court. The Petition for Review offers no convincing basis for this Court to depart from those decisions. The Arizona Corporation Commission and the Arizona Legislature have recognized the potential benefits to Arizona consumers from allowing competition in the provision of electric generating services. Consumers in other states have realized significant benefits from such competition. The Arizona Courts have correctly decided that the Arizona Constitution does not prohibit competition in the sale of electricity. There is no reason for this Court to grant review. If review is granted, the Court of Appeals ruling should be affirmed.

industry.

RESPECTFULLY SUBMITTED this 4th day of June, 2004.

SACKS TIERNEY P.A.

By 

Marvin S. Cohen, Esq.
Charlene G. Robertson, Esq.
Attorneys for Constellation NewEnergy and
Strategic Energy

[536925]

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 14(b) of the Arizona Rules of Civil Appellate Procedure, the undersigned attorney for the Constellation NewEnergy and Strategic Energy hereby certifies that the foregoing Brief (i) is, with the exception of headings, footnotes and block quotes, double spaced, (ii) uses proportionately spaced Times New Roman (scalable) typeface, with a point size of 14, and (iii) contains 2,372 words, according to the word count of the processing system used to prepare the Brief.


Marvin S. Cohen

PROOF OF SERVICE

Pursuant to Rule 4(c) of the Arizona Rules of Court Appellate Procedure, the undersigned attorney for the Appellee hereby certifies that two copies of the foregoing Brief and its Appendix have been served this 4th day of June, 2004, by first class mail, postage prepaid, upon counsel for the parties at the following addresses:

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Graham County Electric Cooperative, Inc.

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Phoenix, Arizona 85004-4533



Marvin S. Cohen

SUPREME COURT OF ARIZONA

PHELPS DODGE CORPORATION,
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
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APPENDIX TO
MEMORANDUM OF *AMICI
CURIAE* CONSTELLATION
NEW ENERGY, INC. AND
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Telephone: (480) 425-2633
Facsimile (480) 425-4933
Attorneys for Constellation NewEnergy
and Strategic Energy

APPENDIX

- Attachment 1 Affidavit of Mona Tierney
- Attachment 2 Affidavit of Jennifer Chamberlin.
- Attachment 3 SALLY HUNT, MAKING COMPETITION WORK IN ELECTRICITY, (John Wiley & Sons) (2002)
- Attachment 4 KEMA Press Release dated January 29, 2004, *Competitive Retail Power Markets Advance Rapidly in 2003, Surpass 50,000 Megawatt Mark*,
<http://ragtime.xenergy.com/xenhome.nsf/htmldocs/1_about?>
- Attachment 5 December 31, 2001, FERC Form No. 1 Annual Report of Major Electric Utilities, Licensees and Others, Arizona Public Service Co., at 401
- Attachment 6 *Scope of Competition in Electric Markets in Texas*, Report to the 78th Texas Legislature, Public Utility Commission of Texas, January 2003
- Attachment 7 Dr. Ronald J. Sutherland, *Estimating the Benefits of Restructuring Electricity Markets: An Application to the PJM Region*, Center for the Advancement of Energy Markets, (September 2003), and related press release, <<http://www.caem.org/website/pages/PJM.htm>>
- Attachment 8 Defense Energy Support Center Fact Book 2002, page 58, <<http://www.desc.dla.mil/DCM/Files/fact02>>

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IN THE COURT OF APPEALS
STATE OF ARIZONA
DIVISION ONE

No. 1 CA-CV 01-0068

**AFFIDAVIT OF JENNIFER
CHAMBERLIN**

PHELPS DODGE CORPORATION;
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
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CORPORATION and formerly known as
CYPRUS SIERRITA CORPORATION
and formerly known as CYPRUS
BAGDAD COPPER CORPORATION
and formerly known as CYPRUS
MINERAL PARK CORPORATION; AJO
IMPROVEMENT COMPANY;
MORENCI WATER & ELECTRIC
COMPANY; ASARCO
INCORPORATED; ARIZONA MINING
ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES and
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SPRINGS VALLEY ELECTRIC

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2 ELECTRIC COOPERATIVE, INC.

3 Plaintiff-Appellees
4 Cross-Appellants,

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6 Plaintiff
7 Cross-Appellant.

8
9 STATE OF California }
10 County of Contra Costa } ss:

11
12 I, Jennifer Chamberlin, being been first duly sworn, upon my oath, hereby testify as
13 follows under penalty of perjury:

14 1. I am the Manager of Regulatory Affairs for Strategic Energy, L.L.C.
15 ("Strategic").

16 2. Strategic is an energy management company that provides electric load
17 aggregation and power supply coordination services. Founded in 1986, Strategic has
18 transformed itself from an energy-consulting firm into one of the largest competitive retail
19 energy service providers in the United States. Strategic now has more than 42,000
20 commercial and industrial customers in states that have enacted retail choice, including
21 Pennsylvania, Ohio, New York, Massachusetts, Texas, and California—with many more
22 states expected to come online in the next few years. More than 170 full-time energy
23 professionals at its headquarters in Pittsburgh, Pennsylvania and in offices across the
24 country are devoted to objective electricity and natural gas management and consulting.

25 3. Strategic procures and manages more than \$2 billion of electricity and natural
26 gas per year and has never had a customer interrupted.

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IN THE COURT OF APPEALS
STATE OF ARIZONA
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No. 1 CA-CV 01-0068

**AFFIDAVIT OF JENNIFER
CHAMBERLIN**

PHELPS DODGE CORPORATION;
PHELPS DODGE MORENCI, INC.,
PHELPS DODGE formerly known as
CYPRUS CLIMAX METALS
CORPORATION and formerly known as
CYPRUS SIERRITA CORPORATION
and formerly known as CYPRUS
BAGDAD COPPER CORPORATION
and formerly known as CYPRUS
MINERAL PARK CORPORATION; AJO
IMPROVEMENT COMPANY;
MORENCI WATER & ELECTRIC
COMPANY; ASARCO
INCORPORATED; ARIZONA MINING
ASSOCIATION; ARIZONA
ASSOCIATION OF INDUSTRIES and
ARIZONANS FOR ELECTRIC CHOICE
AND COMPETITION (collectively
AECC),

Intervenors-Appellants,
Cross-Appellees,

RESIDENTIAL UTILITY CONSUMER
OFFICE,

Intervenor-Appellant,

THE ARIZONA CORPORATION
COMMISSION, an agency of the State of
Arizona,

Defendant-Appellant,
Cross-Appellee,

ARIZONA ELECTRIC POWER
COOPERATIVE, INC.; DUNCAN
VALLEY ELECTRIC COOPERATIVE,
INC.; GRAHAM COUNTY ELECTRIC
COOPERATIVE, INC.; SULPHUR
SPRINGS VALLEY ELECTRIC

SACKS TIERNEY P.A., LAWYERS
4260 NORTH DRINKWATER BOULEVARD
FOURTH FLOOR
SCOTTSDALE, ARIZONA 85261-3893

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COOPERATIVE, INC.; and TRICO
ELECTRIC COOPERATIVE, INC.

Plaintiff-Appellees
Cross-Appellants,

ARIZONA CONSUMERS COUNCIL,

Plaintiff
Cross-Appellant.

STATE OF California }
County of Contra Costa } ss:

I, Jennifer Chamberlin, being first duly sworn, upon my oath, hereby testify as follows under penalty of perjury:

1. I am the Manager of Regulatory Affairs for Strategic Energy, L.L.C. ("Strategic").

2. Strategic is an energy management company that provides electric load aggregation and power supply coordination services. Founded in 1986, Strategic has transformed itself from an energy-consulting firm into one of the largest competitive retail energy service providers in the United States. Strategic now has more than 42,000 commercial and industrial customers in states that have enacted retail choice, including Pennsylvania, Ohio, New York, Massachusetts, Texas, and California—with many more states expected to come online in the next few years. More than 170 full-time energy professionals at its headquarters in Pittsburgh, Pennsylvania and in offices across the country are devoted to objective electricity and natural gas management and consulting.

3. Strategic procures and manages more than \$2 billion of electricity and natural gas per year and has never had a customer interrupted.

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1 4. Strategic Energy is preparing and plans to file with the Arizona Corporation
2 Commission ("Commission") an application for a CCN to supply competitive services as
3 an ESP in Arizona.

4 5. Strategic has intervened in the current Arizona Public Service ("APS") rate
5 case before the Commission (Docket No. E-01345A-03-0437) and is fully participating in
6 the case because it wants to preserve retail competition in Arizona, enter the Arizona retail
7 electric market and offer competitive retail electric service to customers now served by
8 APS.

9
10 FURTHER AFFIANT SAYETH NAUGHT.

11
12 
13 Jennifer Chamberlin

14 SUBSCRIBED AND SWORN TO before me this 18th day of May, 2004, by
15 Jennifer Chamberlin.

16
17 
18 Notary Public

19 My Commission Expires:
20 03/02/08
21



3

Making Competition Work in electricity

SALLY HUNT



John Wiley & Sons, Inc.

CHAPTER 1

Introduction

This was to have been a book about the electric industry in the United States. Ten years after federal legislation began the process in 1992, the United States is stuck in the middle, with some states regulated and some deregulated. There is still no clear policy at the national level for where we are trying to get to, and no road map for getting there. The aim of the book was to return to the fundamentals, to set out a consistent framework for national policy, and proposals for achieving it, so that any interested person could understand it.

But books have a way of going off in their own direction. It turned out that it was impossible to explain even where we are now, let alone what went wrong in California and where we should be headed, without extensive footnotes explaining the concepts, which then turned into text boxes, and eventually into whole chapters. Finally, a wise reviewer suggested dividing the book into two parts—the general story of how to make competition work in electricity, which can apply to any country, and a policy framework for the United States. And that is what we did. It is as simple as I could make it.

Although the book has a single author and reflects in the end a personal prescription, colleagues at NERA have contributed substantially to the drafting and have reviewed every chapter. We (the collegial "we" who pontificate throughout the book) have been involved in virtually every electricity restructuring around the globe and in the United States. By now there is little disagreement between us—we think we know what works and what does not, and which issues are not yet settled. There is even substantial agreement among the few consulting firms who have specialized in these matters. But to my knowledge, this is the first attempt at gathering it all together and applying it to U.S. policy issues.

The restructuring of the electric industry in the United States has had a short but bumpy history. The 1992 federal legislation required open access to the transmission network for some transactions, and removed some

the producer. The vertically integrated companies had monopolies in their own areas, and because of this, prices were regulated—in the United States mostly by regulators at the state level, in other countries by the central government. The integrated companies built to serve their own customers, and had to build enough to serve them all, at all times.

Competition in the electric industry generally means competition only in the production (generation) of electricity and in the commercial functions of wholesaling and retailing. These are the functions that would be deregulated—their prices would be set in competitive markets and not by regulators. The transportation functions (transmission and distribution) cannot be competitive—they are natural monopolies. It doesn't make economic (or environmental or esthetic) sense to build multiple sets of competing transmission systems; everyone has to use the same wires.² They have to serve everyone, and they have to be regulated. System operations also has to be a monopoly, since the system operator has to control all the plants in a control area, or the system will not function. The worry is that in restructuring, the competitive parts need to be separated from the regulated parts, and the coordination that was working well in the integrated companies under regulation may be lost. Institutions have to be designed to replace the previous internal coordination without losing its important efficiencies. This has been done successfully in parts of America, and also abroad, but it is still the major challenge.

THE CASE FOR COMPETITION

The major theme of this book is simple: The need in the United States is to refocus on introducing competition into the production markets, because this is where most of the long-term benefits of restructuring will accrue. Competition in the retail markets will not produce low prices if the production markets are not competitive. It was in the production end that the problems of the old U.S. system were mainly observed³—a highly politicized process of investment, inefficiencies in choice of technology, construction, and maintenance, and difficulties in regulation and pricing, that led to a desire to reorganize the industry. Since these are the places that competition can help, introducing competition in production makes sense for the United States.

²This is in contrast to telephone, where competition in long distance provision did involve competing methods of transmission (such as microwave transmission and fiber-optic cables) owned by different providers.

³Paul Joskow, *Deregulation and Regulatory Reform in the U.S. Electric Power Sector*, MIT Department of Economics, Working Paper, February 17, 2000.

INTRODUCTION

roadblocks to independent generators. Since 1994, the states have been deregulating one by one. Most state plans were stalled by the debacle in California,¹ which cost the citizens of that state, as taxpayers and as customers, billions of dollars out of pocket, 40 percent rate increases, and the first set of rolling blackouts in the memory of most citizens of the United States. Deregulation is widely viewed as a failed experiment, competition as a rip-off. Countries as far away as China and as close as Mexico put their plans on hold because of the risks exposed by California.

This does not have to be the case. The industry is technically complex and also institutionally complicated, but there is by now, after a decade of international experience, a "standard prescription" to deal with the complexities: a checklist of what is required for this industry to become competitive. The technical complexity can be solved: The institutional issues are at the root of the problem in the United States.

The basic problem is the split of regulation between the federal government and the states. It is a thoroughly interstate industry, but no one has overall authority to decide what needs to be done. This has resulted in a plethora of incompatible initiatives. What is required is to develop the conceptual framework, make a plan, and to implement the institutional changes necessary to make it happen.

THE ELECTRIC INDUSTRY

Electric systems around the world are physically and operationally very similar. The physical functions of the industry are generation (production), system operations, transmission, and distribution. The merchant functions are wholesaling and retailing. Transmission and distribution are transport functions—the transmission wires are networked and serve large areas; the distribution wires are local. The typical organization of the industry prior to deregulation was *vertically integrated companies*, incorporating all these functions.

These companies built their own generating plants and coordinated the planning of generation with the planning of transmission. In real time their system operators coordinated the generating plants, telling them when to run and when to back off so as not to overload the transmission network. The customers received a bill that had all these functions "bundled" into a single tariff—the vertically integrated company was the retailer as well as

¹Appendix C reviews the California crisis of 2000–2001. Texas did go ahead with its long-planned deregulation on January 1, 2002.

4 Competition is the basis upon which the U.S. economy was built. It is not an end in itself. It is generally supposed to bring a whole bundle of good things that we as a society value—efficiency and technical progress among them. The U.S. Supreme Court has called the Sherman Act of 1890:

... a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade, resting on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the biggest quality and the greatest material progress, while at the same time providing an environment conducive to the preservation of our democratic political and social institutions.³

The Court was enunciating the economic case for competition—the best allocation of our economic resources, the lowest prices, the highest quality, and the greatest material progress.

In general, a monopoly held in check by regulation is considered a poor substitute for a competitive market and is only to be adopted where, for reasons of natural monopoly or some overriding public interest, competition is not feasible or performs poorly without government controls. We now know from experience elsewhere and in parts of the United States that competition in electricity production is feasible. We know that many of the reasons the industry was organized as regulated monopolies for so long no longer apply. So competition is the standard to beat. Competition is what benefits consumers. And in the final analysis, benefiting consumers should be what public policy is all about.

Consumers want, and should expect to have:

- Low prices (although they know they have to pay enough to keep suppliers in business);
- Reliable service;
- Fairly predictable bills; and
- The opportunity to benefit from value-added services that may come available.

So far, except in the notorious case of California, competition has managed to provide these things where it has been introduced in electric industries around the world. Many other countries, and some jurisdictions in the United States, have successfully introduced competition in production and open access to transmission. There is by now a decade of international

³U.S. Supreme Court: *Northern Pacific Railway Co. v. United States*, 356 U.S. 1, 4 (1958).

5 experience good and not so good, but not one of the countries that introduced competition has gone back to the old monopoly ways. This, in its own way, is a ringing testimonial to the benefits of competition.⁵

However, there are certain technical details that have to be attended to for competition to be able to produce these results. There are cogent reasons why electricity was a monopoly for so long—electricity is indeed different from other commodities. It cannot be stored; it is transported at the speed of light, following laws of physics unique to this commodity, over a fragile and interactive transmission network. The instant you flip the switch, something happens at a generating plant somewhere, and the electricity gets to you in a millisecond. The network requires the constant vigilant control of a system operator; the penalty for inattention is to black out the whole area, as has happened twice on the East Coast of the United States.

But the technical complexity exists everywhere there is electricity. We know what to do, and we know what we don't know. We also know that restructuring this industry is harder than most people think. Airline, gas, banking, and telecommunications industries have been made competitive, with considerable success. They were a piece of cake in comparison to electricity. One thing has been made clear from experience both at home and abroad: You cannot simply cease to regulate the industry and walk away from it expecting a competitive market to rush in and work its magic. The introduction of competition poses some really difficult problems, and rational solutions depend upon understanding these complexities and designing ways to account for them.

Part One of this book is the "Standard Prescription"—the issues that need to be addressed, explanations of the controversial points, and proposals for the most resilient solutions, derived both from economic theory and from years of practical experience in the field. The institutional changes must, in the end, permit competitive markets in electricity to meet the ordinary requirements of commerce. Many buyers and many sellers must be able to access each other easily; they must be able to make contracts in advance and at spot prices; and they must be able to transport the electricity with a high degree of certainty as to the price and availability of the transmission network.

Efficiency is the goal; competition is the means; *open access, restructuring, and deregulation* are terms sometimes used to describe the reforms, but they are the tools to achieve it. We now turn to what these terms mean.

⁵The United Kingdom (actually England and Wales—Scotland and Northern Ireland work under different systems) was an early adopter of competition and has a decade of experience with it. It has made mistakes, but the overall result has been positive. Appendix A reviews the downward course of prices, the introduction of new technology, and the reduction in complaints in the United Kingdom.

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THIS FILING IS (CHECK ONE BOX FOR EACH ITEM)

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Item 2: An Original Signed Form OR Conformed Copy

Form Approved
OMB No. 1902-0021
(Expires 3/31/2005)



FERC Form No. 1: ANNUAL REPORT OF MAJOR ELECTRIC UTILITIES, LICENSEES AND OTHERS

This report is mandatory under the Federal Power Act, Sections 3, 4(a), 304 and 309, and 18 CFR 141.1. Failure to report may result in criminal fines, civil penalties and other sanctions as provided by law. The Federal Energy Regulatory Commission does not consider this report to be of a confidential nature.

RC00751

Exact Legal Name of Respondent (Company)

Arizona Public Service Company

Year of Report

Dec. 31. 2001

| | | | |
|--|---|--|--------------------|
| Name of Respondent Arizona Public Service Company | This Report is: (1) <input type="checkbox"/> An Original (2) <input checked="" type="checkbox"/> A Resubmission | Date of Report (Mo, Da, Yr) 02/13/2003 | Year of Dec. 31 |
|--|---|--|--------------------|

MONTHLY PEAKS AND OUTPUT

1. If the respondent has two or more power systems which are not physically integrated, furnish the required information for each no
2. Report in column (b) the system's energy output for each month such that the total on Line 41 matches the total on Line 20.
3. Report in column (c) a monthly breakdown of the Non-Requirements Sales For Resale reported on Line 24. include in the monthl energy losses associated with the sales so that the total on Line 41 exceeds the amount on Line 24 by the amount of losses incurred making the Non-Requirements Sales for Resale.
4. Report in column (d) the system's monthly maximum megawatt Load (60-minute integration) associated with the net energy for th the difference between columns (b) and (c)
5. Report in columns (e) and (f) the specified information for each monthly peak load reported in column (d).

NAME OF SYSTEM:

| Line No. | Month (a) | Total Monthly Energy (b) | Monthly Non-Requirements Sales for Resale & Associated Losses (c) | MONTHLY PEAK | |
|----------|-----------|--------------------------|---|------------------------------|------------------|
| | | | | Megawatts (d) (See Instr. 4) | Day of Month (e) |
| 29 | January | 2,506,956 | 489,205 | 3,697 | 19 |
| 30 | February | 2,411,455 | 439,272 | 3,475 | 1 |
| 31 | March | 2,524,000 | 563,580 | 3,151 | 1 |
| 32 | April | 2,450,258 | 611,704 | 3,724 | 26 |
| 33 | May | 2,836,583 | 720,587 | 4,840 | 31 |
| 34 | June | 3,147,331 | 686,223 | 5,292 | 29 |
| 35 | July | 3,338,909 | 655,926 | 5,687 | 2 |
| 36 | August | 3,299,695 | 727,350 | 5,528 | 6 |
| 37 | September | 3,534,347 | 930,688 | 4,946 | 4 |
| 38 | October | 2,515,840 | 339,917 | 3,680 | 5 |
| 39 | November | 2,268,360 | 471,204 | 3,111 | 4 |
| 40 | December | 2,136,879 | 329,353 | 3,539 | 14 |
| 41 | TOTAL | 32,970,613 | 6,965,009 | | |

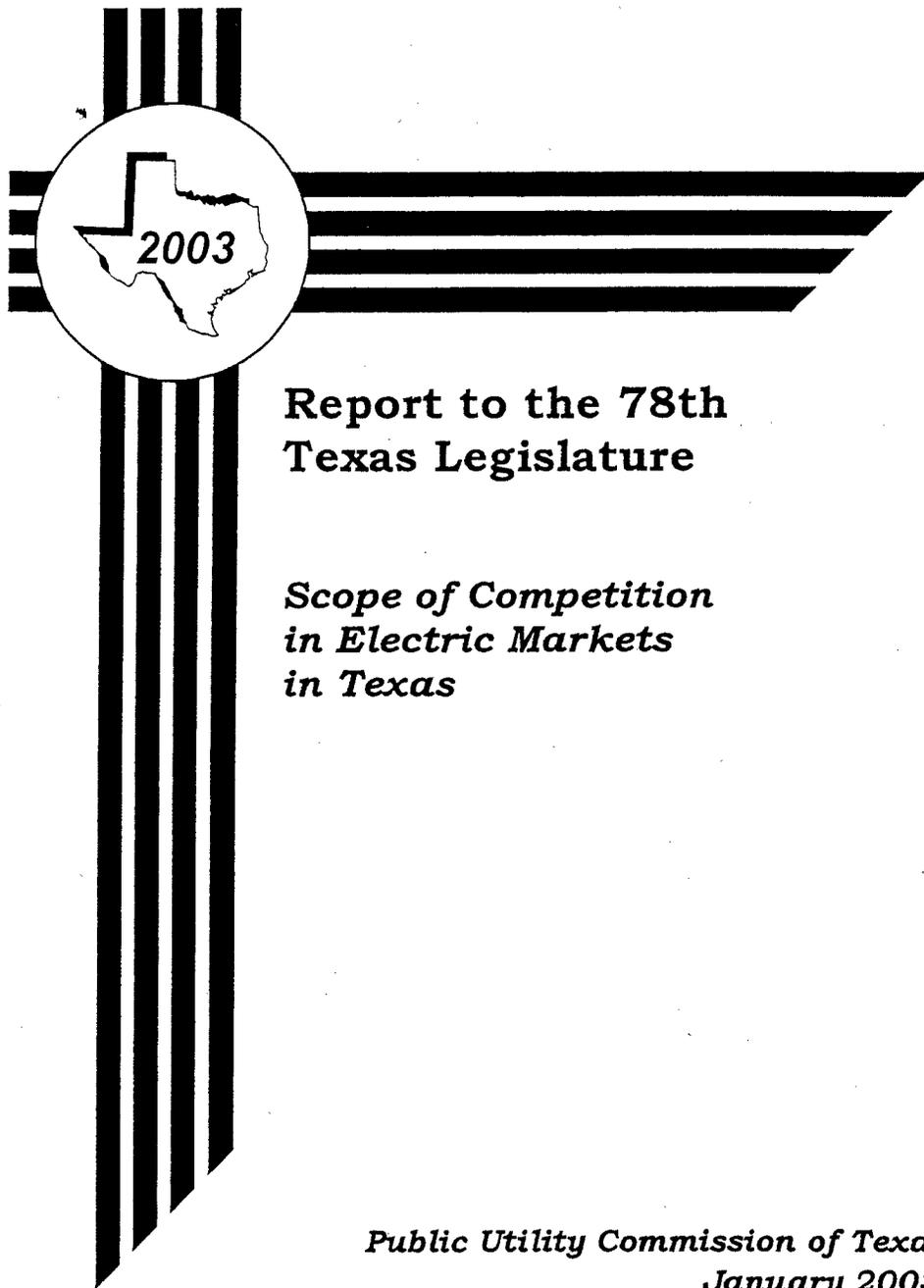
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**Report to the 78th
Texas Legislature**

***Scope of Competition
in Electric Markets
in Texas***

***Public Utility Commission of Texas
January 2003***



**Report to the 78th
Texas Legislature**

*Scope of Competition
in Electric Markets
in Texas*

*Public Utility Commission of Texas
January 2003*

7

Benefits of Competition in the Mid-Atlantic: \$3 Billion Saved in 2002, \$28.5 Billion Future

[Click Here to Download the Benefits of Competition Report](#)

The Center for the Advancement of Energy Markets, a non-profit think tank focused on the energy sector, is pleased to distribute a major study today on the benefits of electric utility restructuring in the Mid-Atlantic (the PJM region).

The study estimates that all consumer classes have benefited enormously with billions of dollars saved (and more projected in the future) due to restructuring efforts, particularly at the wholesale level, in addition to non-price benefits and increased reliability. It is the first study of its kind, providing a quantitative and qualitative analysis of the impact of restructuring efforts on different consumer classes for each state in the Mid-Atlantic. The study is authored by Dr. Ron Sutherland with the active assistance of a working group representing more than 20 organizations and top energy economists in the country.

“This study proves that competition clearly benefits consumers – all consumers, large and small – in the Mid-Atlantic region,” stated Jamie Wimberly, CAEM President. “PJM provides a model for the country to follow and refutes some arguments now heard in Washington, DC, against competition in electricity markets. This study shows instead that regional approaches like PJM are in the best interest of consumers.”

Highlights of the study include:

- More than \$3 billion in total savings in 2002 in the Mid-Atlantic (PJM) region, with individual states and jurisdictions saving in 2002: New Jersey, \$1.46 billion; Pennsylvania, \$993 million; Maryland, \$662 million; Delaware, \$97 million; and the District of Columbia, \$74 million.
- Approximately \$ 28.5 billion in expected future savings, with individual states and jurisdictions expected to save: New Jersey, \$6.4 billion; Pennsylvania, \$10.4 billion; Maryland, \$3.8 billion; Delaware, \$665 million; and DC, \$504 million.
- Households in PA save \$117, on average, on their electricity bill due to electric restructuring. Future lifetime savings in PA from current restructuring efforts (summed and discounted) are \$1,263 per household. Households in other states annually save: NJ per household, \$222; MD, \$165; DE, \$173, and DC, \$15. Future lifetime savings for other states are: NJ, \$1,512 per household; MD, \$1,126; DE, \$1,182; and DC, \$105.
- Using the standard income multiplier in economic analysis, additional macroeconomic benefits should double the direct

customer benefits presented above.

- Lower and middle income households are estimated to be the biggest winners. Lower and middle income households spend on average a much larger share of their income on electricity than high income households. Hence, low and middle income households received proportionately the largest benefit.
- The Mid-Atlantic (PJM) region is gaining a competitive advantage in the form of lower electricity costs compared with other regions, and this advantage will become more significant over time.
- Under PJM's auction system, reliability has improved in the PJM region. Since 1997, the availability factor of generating capacity has increased continuously.
- Finally, while difficult to measure, restructuring efforts in the PJM region and within the states themselves are expected to result in a range of non-price benefits. In fact, as with competition in telecommunications services, there is a reasonable expectation that the largest benefit to consumers from greater competition could be these set of non-price benefits over time rather than simply lower costs.

"There are few economic policy actions that the government could undertake that provide such significant benefits to customers, relative to economic cost. Indeed, the main cost is one of political will." added Dr. Sutherland, the study's principal author and a CAEM Associate Scholar.

"To put these numbers in perspective, many lower income people in the Mid-Atlantic saved more from electric utility restructuring than the Bush Administration's tax cuts. In Pennsylvania, residential consumers saved over \$550 million in 2002, almost 10 times more than what was spent on child care services (\$57.9 million) in Pennsylvania in 2002. In New Jersey in 2002, all consumer classes (residential, commercial and industrial) saved \$1.4 billion in reduced electric bills, 17 times more than what was spent on school construction aid (\$82 million) that year. Maryland, New Jersey, Delaware, Pennsylvania and the District of Columbia – every single state and jurisdiction benefited enormously. "

"The study is more than just an ingenious first estimate of the benefits of competitive power markets," stated Robert Michaels, Professor of Economic at Cal State Fullerton and a member of the working group. "It also provides a well-done, concise summary of the major policy issues that is accessible to non-specialists."

For more information on the report or the working group, contact Jamie Wimberly at jwimberly@caem.org.



Center for the Advancement of Energy Markets

Estimating the Benefits of Restructuring Electricity Markets: *An Application to the PJM Region*

Dr. Ronald J. Sutherland
Senior Scholar, CAEM

<http://www.caem.org>
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September 2003



Version 1.1, October 2003

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Estimating the Benefits From Restructuring Electricity Markets: *An Application to the PJM Region*

Executive Summary

This study estimates the benefits from restructuring the electricity market in the PJM¹ region. Benefits are estimated to reflect current restructuring efforts, not future efforts. Current restructuring efforts have reduced the price of electricity to ultimate customers. This price decline produces current benefits to customers plus an additional benefit that will accrue in the indefinite future. These future benefits are summed and discounted to produce a present value estimate of the benefit of current restructuring efforts. Hence, the benefit estimated in this study is the direct increase in economic value to ultimate customers resulting primarily from the decline in electricity prices from 1997 through 2002. Additional macroeconomic benefits are likely to double the direct customer benefits.

The table on the following page depicts the PJM states and the three sectors of ultimate customers: residential, commercial and industrial. The second column shows electricity costs by state and sector in year 2002 measured in constant dollars. As depicted in the next column, ultimate customers in the PJM region saved about \$3.2 billion in 2002 from current restructuring efforts. This saving is about 15 percent of their 2002 electricity bill. For instance, residential households in Pennsylvania saved, on average, about \$117 on their electric bill in year 2002.² Additional saving will occur in the indefinite future. The value of future saving is summed and discounted to the present and is estimated to be \$28.5 billion. These future savings exceed total electricity costs for the year 2002 (\$22 billion).³ Each household in PA will save, on average, about \$1,262, measured as present value of the sum of future saving.⁴

The last column shows the present value of this future saving relative to 2002 electricity expenses. On average, ultimate customers in the PJM region may obtain total lifetime dollar savings from current restructuring efforts that exceed their electricity bill for a single year. For some lower income households, the saving in their annual electric bill will exceed the saving resulting from the

¹ The PJM region considered here includes: PA, NJ, MD, DE and DC. The PJM region was expanded in 2002 to include parts of OH, WV and VA that are served by Allegheny Power Co.

² The table shows savings in the PA residential sector to be \$558.22 million in year 2002, and there were 4.777 million households in PA in year 2000, for an average saving of \$117 per household in 2002. Household data are obtained from the U.S. Bureau of Census, *Statistical Abstract in the United States, 2002*, Washington DC, Table No. 53, p. 50.

³ The present value of electricity price declines in the PJM region in constant dollars is \$38.7 billion (Tables 4 and A1); however, about \$10.2 billion of cost reduction value would have occurred without restructuring.

⁴ Lifetime saving per household is estimated as present value of savings in PA in 2002 (\$6,027 million) divided by number of households (4.777 million).

2003 federal income tax legislation.⁵ The benefits to consumers from restructuring efforts, particularly in the wholesale electricity market, in the PJM region are substantial. By most measures, the PJM model is successful and would be appropriate for other regions in the United States.

Savings By State and Sector in PJM Region
(in millions of constant dollars)

| | Electricity 2002 Costs | Cost Saving In 2002 | Present Value Future Savings | Percent Saving |
|----------------------|---------------------------|------------------------|---------------------------------|-------------------|
| | \$ mil. Real | \$ mil. Real | 2002, Real | Col. 2/Col. 3 |
| New Jersey | | | | |
| Residential | \$2,464.10 | \$680.14 | \$4,633.74 | 188.05% |
| Commercial | \$2,817.29 | \$738.89 | \$5,034.04 | 178.68% |
| Industrial | \$991.86 | \$139.02 | \$947.17 | 95.49% |
| Total | \$6,359.25 | \$1,468.34 | \$10,003.76 | 157.31% |
| Pennsylvania | | | | |
| Residential | \$4,394.75 | \$558.22 | \$6,027.11 | 137.14% |
| Commercial | \$3,345.24 | \$359.04 | \$4,403.75 | 131.64% |
| Industrial | \$2,512.59 | \$261.50 | \$3,874.61 | 154.21% |
| Total | \$10,398.06 | \$993.97 | \$13,108.83 | 126.07% |
| Maryland | | | | |
| Residential | \$1,828.17 | \$327.49 | \$2,231.18 | 122.04% |
| Commercial | \$1,360.61 | \$143.91 | \$980.48 | 72.06% |
| Industrial | \$558.15 | \$95.37 | \$649.74 | 116.41% |
| Total | \$3,826.53 | \$622.39 | \$4,240.35 | 110.81% |
| Washington DC | | | | |
| Residential | \$138.17 | \$3.81 | \$25.93 | 18.77% |
| Commercial | \$574.62 | \$67.25 | \$458.20 | 79.74% |
| Industrial | \$12.81 | -\$0.28 | -\$1.93 | -15.07% |
| Total | \$748.47 | \$74.05 | \$504.52 | 67.41% |
| Delaware | | | | |
| Residential | \$274.50 | \$51.86 | \$353.30 | 128.71% |
| Commercial | \$202.22 | \$17.65 | \$120.24 | 59.46% |
| Industrial | \$164.70 | \$38.23 | \$260.43 | 158.12% |
| Total | \$647.82 | \$97.62 | \$665.10 | 102.67% |
| Total PJM | \$21,980.13 | \$3,256.38 | \$28,524.34 | 129.77% |

Source: Derived from Tables A1 and A2

⁵Alan Friedlander, "How New Federal Tax law Will Affect Brackets, Bill" *Your Local News, Newspapers Online*, September 17, 2003. Friedlander notes that the lowest income households may save only \$100 in taxes from the Jobs and Growth Tax Relief Reconciliation Act of 2003.

As shown in the table, the present value of the reduction in electricity costs in the PJM region differs between states and sectors, but the largest benefit appears in the residential sector. Lower and middle income households spend on average a much larger share of their income on electricity than high income households. Therefore, lower and middle income households are probably the greatest beneficiaries of the PJM restructuring effort.

The total United States and three nearby states to the PJM region are also experiencing declining electricity prices in constant dollars. However, the present value of these cost decreases is much less than in the PJM region. The estimates presented in the above table are "relative" cost reductions, because they are over and above the cost reductions that characterize neighboring states and the entire United States. Hence, restructuring efforts in the PJM region are a main contributor to the large declines in electricity prices. The PJM region is thereby gaining an economic advantage relative to states that are not restructuring. As further restructuring is implemented – and payments for stranded costs reduced – the PJM region will realize very large economic benefits, especially relative to other regions which have not restructured their markets.

The estimated present value benefits are the dollar value to ultimate customers from electricity price decreases from 1997 through 2002, and assume that such price decreases remain constant in the future. This assumption is admittedly precarious because there are indications that future cost savings will be larger than estimated here, but other indications of smaller benefits. The trends in the PJM wholesale market are in the direction of increasing efficiencies, which should produce larger future cost saving. The completion of stranded cost recovery will increase benefits to customers over time. The expiration of negotiated retail price decreases will encourage the development of retail competition. Hence, benefits estimated here are likely to be understated.

The estimated cost saving in Maryland typifies the region. Cost saving in the electricity bill in year 2002 is more than 10 percent of the 2002 electricity bill. The largest saving is in the residential sector. Future electricity cost savings from current efforts exceed the year 2002 electricity bill. The electricity cost saving in PA is, in percentage terms a little larger than in MD. Pennsylvania customers are currently receiving a cost reduction benefit from restructuring; even though a substantial share of the benefit is deferred until stranded costs are repaid.

The estimated cost saving to New Jersey customers in year 2002, of about \$1.4 billion has been realized, but future benefits are less certain. The decreases in retail prices in New Jersey resulted from a bargain that included initial price declines of 15%. That bargain expired in August 2003, and rates in nominal terms returned to their initial levels. However, the inflation rate from 1997 through 2003 was about 2 percent per year (10% for 5 years), which means that New Jersey customers still have a 10 price decline in electricity rates since 1997 in constant dollars. In addition, with efficiencies achieved in the wholesale PJM market passed forward to customers, some nominal price declines are plausible. The retail price increase in New Jersey in 2003 will provide a much needed incentive towards retail competition, which may ultimately make customers better off than commission mandated price declines. Overall, it appears that with the

expiration of the negotiated price declines, New Jersey customers will still see future benefit in constant dollars, but perhaps not as large as in the above table.

The above table presents benefit estimates of restructuring efforts currently in place. On balance, it is likely that the benefits estimates for New Jersey are optimistic. However, the benefit estimates of the other states are probably conservative, and larger benefits are plausible.

The table presents estimates of the benefit of existing restructuring efforts, which are significant; however, even larger benefits will result from future efforts.

This study considers four main sources of benefits: the wholesale market, the retail market, the capacity market, and price-demand response mechanisms. At this point, PJM has successfully restructured much of the wholesale market, which is the main source of the benefit produced so far. The real time and day ahead auction markets implemented by PJM produce significant efficiencies and cost reductions relative to markets subject to traditional utility regulation. The PJM region has been in restructuring mode for about five years and has been highly successful in the wholesale market, with some success in retail markets. With transition costs repaid, price-demand mechanisms implemented, and a robust competitive retail market with product differentiation, the benefits from restructuring should be much larger than obtained from current price declines. Such benefits, when fully realized, should be sufficient to produce some competitive advantage over states that do not successfully restructure.

The market for total capacity does not yet include significant price-demand response, and only small benefits are accruing from this market. The PJM Interchange recognizes the need for efficient pricing. The benefits from efficient pricing are likely to be large, but are still in the future. Retail restructuring is described as a deal that includes stranded cost recovery, negotiated price declines and other factors. Retail competition currently provides some cost reduction benefits to customers, but the main benefit from retail competition will occur when the transition deal is complete and a price-demand mechanism is implemented. The suggested conclusion is that the largest benefit from retail competition, as well as restructuring overall, is in the future.

Under PJM's auction system, reliability has improved in the PJM region. From 1994 through 1997 the forced outage rate averaged about 10 percent, but decreased to about 4.5 percent during 2001 and 2002. The incentives inherent in the PJM wholesale market encourage reliability in capacity and penalize unreliability. The reduced forced outage rate and increased availability are expected efficiency improvements resulting from the design features of the restructured PJM market.

Finally, while difficult to measure, restructuring efforts in the PJM region and within the states themselves are expected to result in a range of non-price benefits. Expected consumer benefits could range from enhanced customer service, more product offerings, new technologies, more billing options and more product and services tailored to individual consumer needs. Due to increased numbers of marketers in the PJM region, consumers are already beginning to see some of the non-price benefits associated with restructuring. For example, consumers are now being

offered more “green options” and more billing options than before. However, the expectation is that once retail competition in the Mid-Atlantic states develops fully, these benefits will grow. In fact, as with competition in telecommunications services, there is a reasonable expectation that the largest benefit to consumers from retail competition could be these set of non-price benefits over time rather than simply lower costs.

The PJM region is highly touted for its successful restructuring. This analysis of the PJM wholesale market concurs that such acclaim is warranted. Several factors that explain this success are as follows: (1) the PJM power pool has over 70 years experience that provides a basis for developing a more competitive market, (2) the region applies a well-specified auction market model based on real time and day ahead prices, (3) the PJM region is large enough so that the auction market model is well-functioning, (4) spot prices from the auction market model provide an incentive to attract sufficient investment in generating capacity, (5) authority over wholesale restructuring is with the PJM Interchange and with the FERC, who are strongly committed to developing competitive markets.

The benefits from restructuring in the PJM region result from improving market efficiency and removing some of the inefficiencies associated with the traditional regulation of electric utilities. The benefit estimates are not associated with the level of electricity prices. Hence, the benefits estimated here should apply to other states regardless of electricity prices. Major benefits derive from the PJM power pool because of its real time and day ahead prices for energy, capacity and related markets. The incentives inherent in the auction market encourage cost reduction relative to the incentives inherent in traditional utility regulation. Although restructuring in other states in a more competitive direction would enhance the interest of electricity customers, it may not enhance the self-interest of commissioners and legislators. Restructuring is an economic investment; it requires an upfront commitment of mostly political capital to produce a long term economic payoff. In those states averse to restructuring, the best chance for improved efficiency is probably in the wholesale market. The development of retail competition may require prior demonstrated successes from regions such as PJM.

Biography of Dr. Ronald Sutherland

Ron Sutherland is a Ph. D economist with more than 20 years experience analyzing energy issues, including electricity and natural gas markets. Ron began his professional career as an economics professor with the University of Illinois, Springfield, teaching graduate level courses in microeconomics and econometrics. Much of Ron’s experience is with two DOE national laboratories: Los Alamos National Laboratory and Argonne National Laboratory, where he assessed several regulatory, environmental and energy policy issues. Ron wrote several articles for Energy Policy and The Energy Journal on utility deregulation, energy conservation (DSM) programs and long-term contracts. Ron was also a senior economist for the American Petroleum Institute (API). While with API, Ron produced reports and articles on the economics of climate change and energy subsidies.

At present, Ron is an independent consulting economist, as well as a Senior Center Scholar at the Center for the Advancement of Energy Markets and Adjunct Professor of Law at the George Mason University,

Center for the Advancement of Energy Markets
Discovering Consumer, Business, and Environmental Advantage in Energy Markets
Transformed by Technology and Competition

School of Law. Ron provides economic expertise on a variety of energy related issues, but focuses mostly on electricity and natural gas regulatory and restructuring issues. As a Center Scholar for the Center for the Advancement for Energy Markets, Ron wrote a paper "The Role of Default Provider in Restructuring Energy Markets" and has just completed "Estimating the Benefits from Restructuring Electricity Markets: An Application of the PJM Region" Ron can be reached at rsutherland@caem.org and at sutherlandron@hotmail.com.

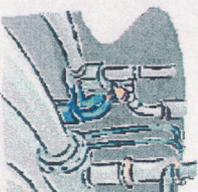
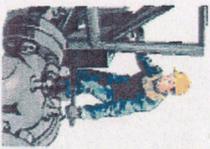
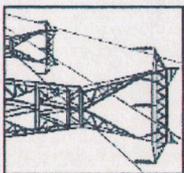
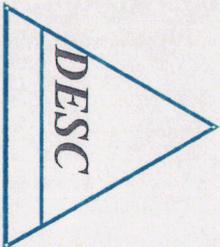
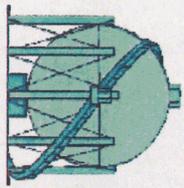
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DEFENSE ENERGY SUPPORT CENTER

Defense Energy Support Center

Total Energy Solutions



Fact Book 2002
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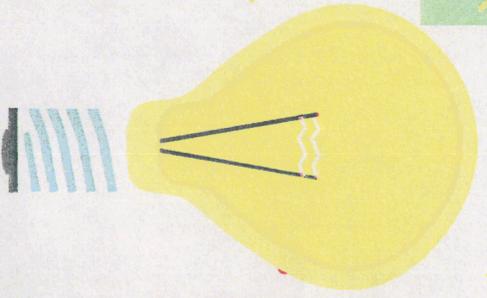
DESC's Competitive Electricity Program

Cost Avoidance

| | FY99 | FY00 | FY01 | FY02 | TOTAL |
|--------------|---------------|-----------------|-----------------|------------------|------------------|
| CA | \$722K | \$1,346K | \$2,566K | | \$4,634K |
| PJM* | \$165K | \$1,066K | \$2,935K | | \$4,166K |
| ME | | \$6K | \$229K | | \$235K |
| TX | | | | \$27,000K | \$27,000K |
| TOTAL | \$887K | \$2,418K | \$5,730K | \$27,000K | \$36,035K |

*PJM – Represents awards in PA, NJ, MD, DE, DC

In addition to the above awards, RFP's have been issued in NY, DE, IL, RI, CT, OH and MI. Under these procurements, the incumbent utility was determined to be the "best value."



| Customers | |
|--------------|------------|
| Army | 27 |
| Navy/ | |
| Marine Corp | 121 |
| Air Force | 12 |
| Army Res. | 261 |
| ANG | 3 |
| Other DOD | 5 |
| Fed Civ. | 25 |
| Coast Guard | 7 |
| TOTAL | 461 |

Experience in all states in which deregulation/restructuring has occurred and in which requirements have been received.