0000120737

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
COMMISSIONER-CHAIRMAN
RENZ D. JENNINGS
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

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

DOCKET NO. RE-00000C-94-165

NOTICE OF FILING

Staff of the Arizona Corporation Commission hereby files the rebuttal testimony Dr. Kenneth Rose in the above-captioned docket.

RESPECTFULLY SUBMITTED this 4th day of February, 1998.

ARIZONA CORPORATION COMMISSION

By: Paul A. Bullis

Paul A. Bullis
Chief Counsel
Legal Division
1200 West Washington
Phoenix, Arizona 85007
(602) 542-3402

Original and ten copies of the foregoing filed this 4th day of February, 1998 with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Copies of the foregoing mailed this 4th day of February, 1998 to:

Service List:

Barbara Klemstine
ARIZONA PUBLIC SERVICE CO.
Law Department, Station 9909
P.O. Box 53999
Phoenix, Arizona 85072-3999

Greg Patterson
RUCO
2828 N Central Ave, Suite 1200
Phoenix, Arizona 85004

Michael A. Curtis
MARTINEZ & CURTIS, P.C.
2712 North 7th Street
Phoenix, Arizona 85006
Attorneys for Arizona Municipal Power Users' Association

Walter W. Meek, President
ARIZONA UTILITY INVESTORS ASSOCIATION
2100 N. Central Avenue, Suite 210
Phoenix, Arizona 85004

Rick Gilliam
LAND AND WATER FUND O F THE ROCKIES
2260 Baseline Road, Suite 200
Boulder, Colorado 80302

Charles R. Huggins
ARIZONA STATE AFL-CIO
110 North 5th Avenue
Phoenix, Arizona 85002

David C. Kennedy
LAW OFFICES OF DAVID C. KENNEDY
100 West Clarendon Avenue, Suite 200
Phoenix, Arizona 85012-3525

Norman J. Furuta
DEPARTMENT OF THE NAVY
900 Commodore Drive, Building 107
P.O. Box 272 (Attn. Code 90C)
San Bruno, California 94066-0720

Thomas C. Horne
Michael S. Dulberg
HORNE, KAPLAN & BISTROW, P.C.
40 North Central Avenue, Suite 2800
Phoenix, Arizona 85004

Barbara S. Bush
COALITION FOR RESPONSIBLE ENERGY EDUCATION
315 West Riviera Drive
Tempe, Arizona 85252

Rick Lavis
ARIZONA COTTON GROWERS ASSOCIATION
4139 East Broadway Road
Phoenix, Arizona 85040

Steve Brittle
DON'T WASTE ARIZONA, INC.
6205 South 12th Street
Phoenix, Arizona 85040

Karen Glennon
19037 N. 44th Avenue
Glendale, Arizona 85308

COLUMBUS ELECTRIC COOPERATIVE, INC.
P.O. Box 631
Deming, New Mexico 88031

CONTINENTAL DIVIDE ELECTRIC COOPERATIVE
P.O. Box 1087
Grants, New Mexico 87020

DIXIE ESCALANTE RURAL ELECTRIC ASSOCIATION
CR Box 95
Beryl, Utah 84714

GARKANE POWER ASSOCIATION, INC.
P.O. Box 790
Richfield, Utah 84701

Stephen Ahearn
ARIZONA DEPT OF COMMERCE
ENERGY OFFICE
3800 North Central Avenue, 12th Floor
Phoenix, Arizona 85012

Betty Pruitt
ARIZONA COMMUNITY ACTION ASSOC.
202 E. McDowell, #255
Phoenix, Arizona 85004

Bradley Carroll
TUCSON ELECTRIC POWER CO.
P.O. Box 711
Tucson, Arizona 85702

Mick McElrath
CYPRUS CLIMAX METALS CO.
P.O. Box 22015
Tempe, Arizona 85285-2015

A.B. Baardson
NORDIC POWER
4281 N. Summerset
Tucson, Arizona 85715

Michael Rowley
c/o CALPINE POWER SERVICES
50 West San Fernando, Suite 550
San Jose, California 95113

Dan Neidlinger
3020 N. 17th Drive
Phoenix, Arizona 85015

Jessica Youle
PAB300
SALT RIVER PROJECT
P.O. Box 52025
Phoenix, Arizona 85072-2025

Clifford Cauthen
GRAHAM COUNTY ELECTRIC CO-OP
P.O. Drawer B
Pima, Arizona 85543

Joe Eichelberger
MAGMA COPPER COMPANY
P.O. Box 37
Superior, Arizona 85273

Craig Marks
CITIZENS UTILITIES COMPANY
2901 N. Central Avenue, Suite 1660
Phoenix, Arizona 85012

Jack Shilling
DUNCAN VALLEY ELECTRIC COOPERATIVE
P.O. Box 440
Duncan, Arizona 85534

Nancy Russell
ARIZONA ASSOCIATION OF INDUSTRIES
2025 N. 3rd Street, Suite 175
Phoenix, Arizona 85004

Barry Huddleston
DESTEC ENERGY
P.O. Box 4411
Houston, Texas 77210-4411

Steve Montgomery
JOHNSON CONTROLS
2032 West 4th Street
Tempe, Arizona 85281

Michelle Ahlmer
ARIZONA RETAILERS ASSOCIATION
137 University
Mesa, Arizona 85201

Ken Saline
K.R. SALINE & ASSOCIATES
160 N. Pasadena
Suite 101
Mesa, AZ 85201

Louis A. Stahl
STREICH LANG
2 North Central Avenue
Phoenix, Arizona 85004

Douglas Mitchell
SAN DIEGO GAS AND ELECTRIC CO.
P.O. Box 1831
San Diego, California 92112

Sheryl Johnson
TEXAS-NEW MEXICO POWER CO.
4100 International Plaza
Fort Worth, Texas 76109

Ellen Corkhill
AARP
5606 North 17th Street
Phoenix, Arizona 85016

Andrew Gregorich
BHP COPPER
P.O. Box M
San Manuel, Arizona

Larry McGraw
USDA-RUS
6266 Weeping Willow
Rio Rancho, New Mexico 87124

Jim Driscoll
ARIZONA CITIZEN ACTION
2430 S. Mill, Suite 237
Tempe, Arizona 85282

William Baker
ELECTRICAL DISTRICT NO. 6
P.O. Box 16450
Phoenix, Arizona 85011

John Jay List
General Counsel
NATIONAL RURAL UTILITIES
COOPERATIVE FINANCE CORP.
2201 Cooperative Way
Herndon, Virginia 21071

Wallace Tillman
Chief Counsel
NATIONAL RURAL ELECTRIC
COOPERATIVE ASSOCIATION
4301 Wilson Blvd.
Arlington, Virginia 22203-1860

Robert Julian
PPG
1500 Merrell Lane
Belgrade, Montana 59714

C. Webb Crockett
FENNEMORE CRAIG
3003 N. Central Avenue, Suite 2600
Phoenix, Arizona 85012-2913
Attorneys for Asarco, Inc., Cyprus Climax Metals Co.;
Enron, Inc. and AAEC

Department of Navy
Naval Facilities Engineering Command
Navy Rate Intervention
901 M Street SE, Building 212
Washington, DC 20374
Attn: Sam DeFrawi

Robert S. Lynch
340 E. Palm Lane, Suite 140
Phoenix, Arizona 850o04-4529

Douglas A. Oglesby
Vantus Energy Corporation
353 Sacramento Street, Suite 1900
San Francisco, California 94111

Michael Block
Goldwater Institute
Bank One Center
201 North Central
Concourse Level
Phoenix, Arizona 85004

Stan Barnes
Copper State Consulting Group
100 W Washington Street, Suite 1415
Phoenix, Arizona 85003

Carl Robert Aron
Executive Vice President and COO
Itron, Inc.
2818 N. Sullivan Road\
Spokane, Washington 99216

Douglas Nelson
DOUGLAS C NELSON PC
7000 N. 16th Street, Suite 120-307
Phoenix, Arizona 85020

Lawrence V. Robertson Jr.
MUNGER CHADWICK PLC
333 North Wilmot, Suite 300
Tucson, Arizona 85711-2634
Attorney for PGE Energy

Tom Broderick
6900 East Camelback Rd. # 700
Scottsdale, Arizona 85251

Albert Sterman
ARIZONA CONSUMERS COUNCIL
2849 East 8th Street
Tucson, Arizona 85716

Michael Grant
GALLAGHER & KENNEDY
2600 N. Central Avenue
Phoenix, Arizona 85004
Attorneys for AEPCO

Suzanne Dallimore
Antitrust Unit Chief
Department of Law Building
Attorney General's Office
1275 West Washington Street
Phoenix, Arizona 85007

Lex Smith
Michael Patten
BROWN & BAIN PC
2901 N. Central Avenue
Phoenix, Arizona 85001-0400
Attorneys for Morenci Water & Electric,
Ajo Improvement & Phelps Dodge Corp.

Vinnie Hunt
CITY OF TUCSON
Department of Operations
4004 S. Park Avenue, Building #2
Tucson, Arizona 85714

Steve Wheeler
Thomas M. Mumaw
SNELL & WILMER
One Arizona Center
400 E. Van Buren Street
Phoenix, Arizona 85004-0001
Attorneys for APS

William Sullivan
MARTINEZ & CURTIS, P.C.
2716 N. 7th Street,
Phoenix, Arizona 85006
Attorneys for Mohave Electric Cooperative and
Navopache Electric Cooperative

Elizabeth S. Firkins
INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, L.U. #1116
750 S. Tucson Blvd.
Tucson, Arizona 85716-5698

Carl Dabelstein
2211 E. Edna Avenue
Phoenix, Arizona 85022

Larry K. Udall
Arizona Municipal Power Users' Assoc.
2712 N. 7th Street
Phoenix, Arizona 85006-1090

Roderick G. McDougall
City Attorney
Attn: Jesse Sears, Assistant Chief Counsel
200 W Washington Street, Suite 1300
Phoenix, Arizona 85003-1611

William J. Murphy
200 W Washington Street, Suite 1400
Phoenix, Arizona 85003-1611

Terry Ross
Center for Energy & Economic Development
P. O. Box 288
Franktown, Colorado 80116

Peter Glaser
Doherty Rumble & Butler PA
1401 New York Ave NW Suite 1100
Washington DC 20005

Russell E. Jones
33 N. Stone Ave., Suite 2100
P.O. Box 2268
Tucson, Arizona 85702

Christopher Hitchcock
P.O. Box 87
Bisbee, Arizona 85603-0087
Attorneys for Sulphur Springs Valley
Electric Cooperative, Inc.

Myron L. Scott
1628 E. Southern Avenue, No. 9-328
Tempe, AZ 85282-2179
Attorneys for Arizona for a Better Environment

Andrew Bettwy
Debra Jacobson
SOUTHWEST GAS CORPORATION
5241 Spring Mountain Road
Las Vegas, Nevada 89102

Barbara R. Goldberg
OFFICE OF THE CITY ATTORNEY
3939 Civic Center Blvd.
Scottsdale, Arizona 85251

Phyllis Rowe
Arizona Consumers Council
P. O. Box 1288
Phoenix, Arizona 85001

Thomas Pickrell
Arizona School Board Association
2100 N. Central Avenue
Phoenix, Arizona 85004

By: Mary Ippolito

SUMMARY OF REBUTTAL TESTIMONY OF
DR. KENNETH ROSE

There are four issues addressed in this rebuttal testimony. First, Staff reiterates its position that while it favors a top-down approach to estimate uneconomic costs, this estimate should only be used to indicate the size and direction of the competitive gain or loss in Arizona. If the Commission decides to allow recovery of production uneconomic costs it should be through a "transition revenue" mechanism discussed in the direct testimony that is based on a specific criteria set by the Commission.

Second, Staff does not believe that the Commission should determine up front a percentage of the predicted uneconomic costs that will be allowed for recovery. There is little economic basis for determining the "correct" percentage. Consequently, it will be difficult to determine and likely result in a protracted process to determine it. Third, some witnesses testified that customers who do not choose an alternative supplier should not have to pay for uneconomic costs. The reason for the concern is that customers that leave the utility will not be required to pay or that a broadly defined transition charge will be added to the current rate. Staff believes that its transition revenue and price cap approach will avoid both these possibilities. This is because all distribution customers will pay the transition charge independent of the supplier and the price cap will ensure that no retail customer pays more than their current rate.

Finally, Staff challenges the view that a sale or auction is the best means to value utility assets for purposes of determining uneconomic costs. An unintended consequence of a sale or auction is that the market price may be higher than without the sale or auction. As a result, the apparent "savings" will be paid back by customers over time in the form of higher market prices. Therefore, this option cannot be justified based on only an argument that it will reduce uneconomic costs. If recovery of uneconomic cost is limited, then the utility will have an incentive to decide voluntarily whether to sell its assets based on the company trying to minimize its uneconomic costs. There may be other reasons to require divestiture of generation assets, but reducing uneconomic costs should not be considered one of them.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
COMMISSIONER-CHAIRMAN
RENZ D. JENNINGS
COMMISSIONER
CARL J. KUNASEK
COMMISSIONER

IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA	DOCKET NO. RE-00000C-94-165

REBUTTAL TESTIMONY OF

DR. KENNETH ROSE

ON BEHALF OF THE

ARIZONA CORPORATION COMMISSION

TABLE OF CONTENTS

I. TOP-DOWN APPROACH FOR ESTIMATING UNECONOMIC COSTS IS APPROPRIATE.

Q. You suggest the use of a top-down approach for estimation of uneconomic costs. Are there other witnesses and parties that prefer the use of a top-down approach?

A. The top-down approach, sometimes referred to as the lost revenues approach is endorsed by a majority of the witnesses that addressed the issue, including Robert Malko, witness for Arizonans for Electric Choice & Competition et al.; Richard Rosen, witness for Residential Utility Consumer Office; Sean Breen, witness for Citizens Utilities; Walter Meek, witness for Arizona Utility Investors Association; Charles Bayless, witness for Tucson Electric Power Company; Dirk Minson, witness for Arizona Electric Coop; Jack Davis and William Hieronymus, witnesses for Arizona Public Service Co.; Alan Propper, witness for Navopache Electric Coop; Ralph C. Smith, witness for the Navy, Department of Defense, and Federal Executive Agencies; Carl Dabelstein, CPA; and Elizabeth Firkins, witness for the International Brotherhood of Electrical Workers.

Q. Does this mean that Staff and these parties are in agreement on this issue?

A. Not necessarily. Staff's position is that the top-down approach is an acceptable approach to *estimate* uneconomic cost, but not for determining the amount for recovery. There are several advantages to the top-down approach. First, while it involves making a considerable number of assumptions and forecasts, it is relatively straightforward and requires less data than asset-by-asset or bottom-up approaches. Second, the top-down approach considers the affected utility's system as a whole and implicitly nets out the uneconomic assets (where the book value is greater than estimated market value) with those assets that are economic (where the book value is less than the estimated market value). This is an appropriate method of estimating the fair value of the generation assets in a competitive market. While this means that there is no asset-by-asset comparison, this level of detail is not necessary for the approach to dealing with uneconomic costs that is recommended by Staff. Another important consideration is that the top-down approach, which usually results in a wide range of predictions, yields results that are not substantially different from the bottom-up approach. Staff does not expect pinpoint accuracy and, more importantly, the proposed method of dealing with potential uneconomic costs does not require it.

Where Staff differs substantially from the testimony of others, regardless of their preferred estimation method, is the use of the results of the analysis. Staff believes that the estimate of uneconomic costs should only be used to provide an approximation of the size and direction of each utility's potential uneconomic cost or competitive gain. This is to gather information on the competitiveness of Arizona's affected utilities, not to determine compensation for uneconomic costs.

Under Staff's recommendations, the Commission would determine, if recovery of uneconomic cost is allowed, an amount of "transition revenues" based on a specific set of criteria, such as financial integrity of the utility in light of the fair value of its generation assets in a competitive market. This would not require an exact determination of the amount of potential competitive loss. Rather, the Commission would determine an estimate of the market revenue and determine any additional revenues needed to meet the predetermined criteria. After the transition period (Staff recommends five years or less), the utility would no longer receive any transition revenues for production uneconomic costs.

Alternatively, in another approach to determining transition revenues, the Commission could base it on a performance standard, such as the long-run average cost of generation of power in the region. The transition revenue would be determined on a declining percentage of the difference between the company's average cost and the region's average cost through the transition period. This is not intended to be full compensation for potential competitive losses, any shortfall would be the responsibility of the company to either try to reduce by lowering operating costs or through reduced earnings.

Under either approach, once the transition revenue amount and the length of the transition period are determined, no true-up is necessary if less than the full amount of estimated uneconomic costs is permitted to be recovered. This may provide a stronger incentive to minimize uneconomic costs than would a true-up mechanism that periodically adjusts the amount of transition revenue. Staff recognizes that determining the specific criteria and the transition revenue amount for each affected utility will require additional effort, but this should be determined in the next step in these proceedings. To date, Staff has not developed or attempted to develop a set of specific criteria (financial or performance) or estimated the transition revenues for the affected utilities.

II. TRANSITION REVENUES APPROACH SHOULD BE USED FOR DEALING WITH UNECONOMIC COSTS.

Q. Several witnesses testified that the Commission should determine the amount of "stranded costs" and then allow recovery of some percentage of that amount.[1/] Do you think that is an appropriate approach?

A. No. At best it would be very difficult to determine an exact percentage of uneconomic costs to allow; at worst, it would be arbitrary and cause a protracted proceeding to determine the "correct" percentage. There is simply no economic principle that suggests a particular percentage, except, as noted in my direct testimony, the less that is allowed, the better it is in terms of economic efficiency. This suggests that zero percent is the best percentage to use in terms of just economic efficiency.

Moreover, since this requires taking a percentage of an estimate of the amount of uneconomic costs, the percentage itself would not be based on a solid foundation. As also noted in my direct testimony, any estimate of uneconomic costs is extremely sensitive to relatively small changes in the assumptions. Very small changes in the forecasted market price, for example, will change the estimate substantially. The likelihood of being wrong in guessing the future market price is very high since there is no history of a retail market on which to base the forecast. In addition, there are many other assumptions used to make the estimate that are also very speculative including future demand for power, variable cost, plant capacity factors, capital additions and their cost, and many others.

Again, Staff prefers the approach suggested in my direct testimony and described in the answer to the previous question; that is, the Commission allows an amount of "transition revenues" based on a specific set of criteria, such as financial integrity of the utility or performance standard. This would require no determination of an agreed on amount of competitive loss or a fixed percentage, and would fairly value the affected utilities' generation in the competitive market for . . .

1/ Richard A. Rosen for The Residential Utility Consumer Office, Enrique A. Lopezlira for Office of the Attorney General, and J. Robert Malko and Kevin C. Higgins both for Arizonans for Electric Choice and Competition.

both the utilities and their customers. Staff believes this is in the public interest because it balances the needs of consumers and utilities in the transition to a competitive market.

Q. Several parties have indicated that customers that do not choose another supplier should not pay for uneconomic costs.[2/] Will Staff's proposal to only allow recovery through transition revenues result in these customers paying for uneconomic costs or paying higher prices than their current rates?

A. No. There are two basic concerns; one is that when customers leave the utility and purchase power elsewhere, the cost that is "stranded" will be shifted to the remaining customers. The second concern is that a broadly applied transition charge will be added on top of the current rate or standard offer. This first problem has been solved in other states by making the transition component "nonbypassable," that is, the departing customer will pay the transition charge irrespective of where the power originated. Neither concern is a problem under Staff's proposal because current rates will be unbundled into their component parts. For example, all retail customers' bills may have the following breakdown: a generation charge, a transition charge (if any), and a transmission and distribution charge.[3/] For the utility the generation charge may be a "standard offer" that represents its generation price. All distribution customers, whether they choose an alternative supplier or not, will pay the transition charge. Also, the price cap discussed in the direct testimony will ensure that the total price paid by retail customers will not exceed their current rate.

III. DIVESTITURE OF ASSETS SHOULD NOT BE USED FOR PURPOSES OF ESTIMATING UNECONOMIC COSTS.

Q. Several witnesses testified that they believed that an appropriate way to determine the value of utility assets is to sell or auction off the generation plants.[4/] This would, they

---

[2/] Betty K. Pruitt for Arizona Community Action Association, Sean Breen for Citizens Utilities, and Albert Sterman for Arizona Consumers Council.

[3/] A similar point is made by Kevin C. Higgins for Arizonans for Electric Choice and Competition (pages 34 and 35).

[4/] Douglas C. Nelson for Electric Competition Coalition, Mona Petrochko for Enron Energy Services, Inc., and Douglas A. Oglesby for PG&E Energy Services Corporation. Others noted that it could be used to mitigate uneconomic costs, including

argue, provide a more precise means to determine generation asset value and estimate uneconomic cost. Do you agree?

A. No. Proponents of this approach argue that if a higher and more accurate value is obtained for the utility's assets, then the amount of uneconomic cost, and presumably the amount customers will have to pay, is reduced. While it may be true that using a sale or auction would provide a better means than an administrative approach to determine asset value and may well result in a higher value for the assets than an administrative method, there is a major limitation to using this approach to determine value for *purposes of estimating uneconomic cost*— the reduction in uneconomic costs from a sale or auction of the utility's assets is only illusionary because of the effect that the sale will likely have on the retail market price for power in the state.

Q. Can you construct a simple example to explain this point?

A. Yes. Suppose that a utility has just three plants with a net book value of $50 million, $75 million, and $100 million respectively, with a total book value of $225 million. For this simple example, it is assumed that these three plants are all of the utility's generation assets. By an administrative means, such as the "lost revenues" method, it is found that each plant's estimated value is $75 million, $85 million, and $15 million respectively, with a total value is $175 million. Assume also, for illustration purposes, that the utility will be allowed to recoup one hundred percent of their uneconomic costs. In this case, the uneconomic cost is $50 million (book value minus the estimate value or $225 - $175), and is the amount customers will be required to pay.

If the utility's generating assets were required to be sold or auctioned off, it is likely that it would result in a higher value for some plants than estimated through administrative means. Again for illustration purposes, assume that the plants are sold and results in a market value of $100 million, $100 million, and $10 million, respectively for a total value of $210 million. In this case the uneconomic value is reduced to $15 million, precisely the point being made by supporters of a sale or auction of generation assets.

. . .

Sean Breen for Citizens Utilities, Charles Bayless for Tucson Electric, and Carl Dabelstein, CPA.

Example 1

Significant Uneconomic Cost in Plant 3

Value Method	Plant 1	Plant 2	Plant 3	Total
Book Value (net)	50	75	100	225
Administrative Value	75	85	15	175
Market Value	100	100	10	210

However, there is an important factor that is being overlooked by supporters of this method. Note that the new owners of the plants after the sale will want to recover their capital investment ($210 million), which is now higher than under the administrative method ($175 million). These new owners will want to recover this capital cost through the price they charge customers. Therefore, the "savings" from lowering the amount of uneconomic costs that resulted from the sale or auction is simply returned to the new owners through a higher market price. The apparent "savings" to the customer is only an illusion. The same result occurs when there is a split between the customers and the utility of the uneconomic cost recovered, except, of course, the utility is not paying the higher market price for power, customers are. Therefore, a sale or auction will reduce any share the utility is required to shoulder of potential uneconomic costs, but provides little or no benefit to customers.

It should be noted that the aim of administrative estimation methods is to estimate the market value relative to the current book value of the generation assets. This is accomplished by estimating the net present value of the expected revenue stream that an asset will produce over its estimated life. This is similar to the way a potential purchaser of the plants may try to estimate the plants' value. They would take into account their expectations of future market conditions and desired profit. For a utility that currently owns the plants, if the net book value is greater than the market estimate, the difference is the estimate of uneconomic cost or competitive loss. If the market value is greater than the book cost, then there is a net competitive gain. The reason that administrative valuation methods may undervalue the assets may be due to the value potential purchasers may place on intangibles such as siting certification, location proximity to loads, and access to transmission and distribution lines. Purchasers may also place a high value on being

among the early suppliers to be established in the area. The value of these intangibles will not be reflected on the utility's accounting books but will be reflected in the price paid for an asset.

Q. What if the net result is no uneconomic costs, but a net gain from the sale or auction?

A. In a second example, the same result can occur even when the auction is much more successful and results in no net uneconomic cost. Example 2 has the same values for each plant for both the net book and administrative values. In this case assume the sale or auction is very successful and results in a much higher amount paid for plants 1 and 2 than the first example. In this case the sale or auction results in $125 million, $125 million, and $10 million or $260 million in total value. The result is that there is a net *gain* of $35 million. If the rule is full recovery of uneconomic costs, then it is appropriate to assume that customers would be given a full *refund* if there was a net gain. Thus, customers get a refund, but the new owners of the plants must now recover a capital cost of $260 million in the market price.

Example 2

Higher Values Obtained from Sale Results in Net Gain

Value Method	Plant 1	Plant 2	Plant 3	Total
Book Value (net)	50	75	100	225
Administrative Value	75	85	15	175
Market Value	125	125	10	260

This illustrates the point that no matter how successful the sale or auction is, the apparent "savings" in uneconomic cost to customers is illusionary. This also demonstrates what would be the worst condition for customers, an administrative valuation method with one hundred percent recovery of uneconomic costs and the utility later sells the assets for a higher value but none of the difference is given back to the customers. What Staff proposed in the direct testimony would prevent this from occurring by limiting the amount of uneconomic costs and by not basing recovery of uneconomic cost on an administratively estimated amount.

Q. Are there any mitigating factors that may offset this market price affect?

A. A mitigating factor may be that the new owners of the plants may be able to reduce variable operating costs more than the utility. However, it should be expected that in a dynamic competitive

market, the pressure to reduce costs will be present irrespective of who owns the asset. Also, potential purchasers will factor in their expectations of future operating costs and this will also be reflected in their offer price for the asset. For example, if they expect that they can reduce operating costs of the plant, they will be willing to pay relatively more for the asset.

Another mitigating factor may be that the retail market price in the region will be affected by power supplied from outside Arizona so that there is not necessarily a one-to-one relationship between the sale price of the generation assets in Arizona and the state's retail price. However, a requirement to sell all investor-owned plants in the state will mean that a substantial portion of the state's and the region's generation resources will be revalued at the market price. This will undoubtedly, with all other factors being equal, result in a higher market price for the state's retail customers. Also, this will affect the price in the state for many years in the future.

Q. Are there any other problems with using the sale or an auction to value utility assets?

A. Yes. The Commission should consider that it may be difficult, with divestiture, to return the net benefit to customers. The Commission would have to create a mechanism to return any competitive gain to customers. Also, auctions do not automatically "get it right." Michael Rothkopf[5/] points out that the auction design would have considerable impact on the outcome. An improperly designed auction could undervalue or overvalue the generation assets. The Commission would need to carefully consider the sale or auction design options.[6/] Depending on the relative amount of economic and uneconomic costs and future market prices, customers may be made worse off.

Q. Please clarify Staff's position with respect to divestiture and the sale or auction of assets to value uneconomic costs.

5/ Michael H. Rothkopf, "On Misusing Auctions to Value Stranded Assets," *The Electricity Journal*, December 1997.

6/ Design questions include (among many others): Should there be sealed or open bidding, first or second price bidding, should the utility be allowed to bid for its own assets, and what kind of Commission oversight of the process should there be? A discussion of the advantages and disadvantages of the different sale and auction design options is beyond the scope of this generic proceeding.

A. Staff is not arguing that there should or should not be divestiture of utility generating assets. Rather, Staff believes that the Commission should not base its decision on whether there should or should not be divestiture of utility assets based solely on valuing utility assets for purposes of determining uneconomic costs. There may be valid reasons to require divestiture, but these should be explored in a separate proceeding on, for example, market power.

If divestiture is left as being only voluntary, the utility will decide when the sale of its assets makes economic sense to reduce its uneconomic costs. The utility will consider its options by comparing a sale or auction (where it would choose a sale method to maximize the sale price) to continuing to own the plants itself. If it decides to remain the owner, the utility has the option to either have someone else operate the plants or continue to operate the plants itself, depending on what it determines to be the best (that is, lowest cost) option.

This corresponds with Staff's position in the direct testimony on the recovery of uneconomic costs, that is, the best way to mitigate uneconomic costs and the likeliest way to have a truly competitive generation market[7/] develop is to limit recovery. In both cases, the utility is given the correct economic signal to minimize uneconomic cost. Allowing full recovery of potential uneconomic costs only impedes this process. If recovery of potential uneconomic cost is limited, then the effect on the market price from a sale or auction described above will be less of a concern. Ideally, what should occur is that what the company decides is in its own best interest, is also in the customers' when it comes to the treatment of uneconomic cost.

Q. Does this conclude your testimony?

A. Yes.

7/ What is meant by "truly competitive generation market" is one where the market price is determined by the interaction of suppliers and customers and is not influenced or distorted by a single producer or group of producers seeking to raise the price above a competitive equilibrium level.