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BEFORE THE ARIZONA CORPORATION COMMISSION  
Arizona Corporation Commission

1 WILLIAM A. MUNDELL  
2 Chairman  
3 JIM IRVIN  
4 Commissioner  
5 MARC SPITZER  
6 Commissioner

DOCKETED  
JUN 11 2002

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7 IN THE MATTER OF THE GENERIC PROCEEDINGS CONCERNING ELECTRIC RESTRUCTURING.
9 IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY'S REQUEST FOR VARIANCE OF CERTAIN REQUIREMENTS OF A.A.C. R14-2-1606
11 IN THE MATTER OF THE GENERIC PROCEEDINGS CONCERNING THE ARIZONA INDEPENDENT SCHEDULING ADMINISTRATOR.
14 IN THE MATTER OF TUCSON ELECTRIC POWER COMPANY'S APPLICATION FOR A VARIANCE OF CERTAIN ELECTRIC COMPETITION RULES COMPLIANCE DATES
17 IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY FOR APPROVAL OF ITS STRANDED COST RECOVERY

DOCKET NO. E-00000-02-0051

DOCKET NO. E-01345-01-0822

DOCKET NO. E-00000A-01-0630

~~DOCKET NO. E-00000-02-0051~~

DOCKET NO. E-01933A-98-0471

**NOTICE OF FILING OF REBUTTAL TESTIMONY OF**

**THOMAS BRODERICK**

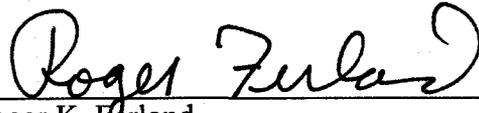
**ON BEHALF OF HARQUAHALA GENERATING COMPANY, LLC**

Harquahala Generating Company, LLC, by and through its attorneys, hereby files the Rebuttal Testimony of Thomas Broderick, Director, External Relations, West Region, PG&E National Energy Group, pertaining to the issues in "Track A" for the above-captioned proceeding.

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RESPECTFULLY SUBMITTED this 11<sup>th</sup> day of June, 2002

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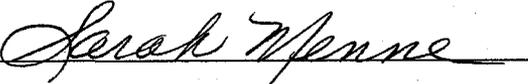
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E-01933A-02-0069; and E-01933A-98-0471

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**BEFORE THE ARIZONA CORPORATION COMMISSION**

WILLIAM A. MUNDELL  
Chairman  
JIM IRVIN  
Commissioner  
MARC SPITZER  
Commissioner

IN THE MATTER OF THE GENERIC  
PROCEEDINGS CONCERNING ELECTRIC  
RESTRUCTURING.

DOCKET NO. E-00000-02-0051

IN THE MATTER OF ARIZONA PUBLIC  
SERVICE COMPANY'S REQUEST FOR  
VARIANCE OF CERTAIN  
REQUIREMENTS OF A.A.C. R14-2-1606

DOCKET NO. E-01345-01-0822

IN THE MATTER OF THE GENERIC  
PROCEEDINGS CONCERNING THE  
ARIZONA INDEPENDENT SCHEDULING  
ADMINISTRATOR.

DOCKET NO. E-00000A-01-0630

IN THE MATTER OF TUCSON ELECTRIC  
POWER COMPANY'S APPLICATION FOR  
A VARIANCE OF CERTAIN ELECTRIC  
COMPETITION RULES COMPLIANCE  
DATES

DOCKET NO. E-01933A-02-0069

IN THE MATTER OF THE APPLICATION  
OF TUCSON ELECTRIC POWER  
COMPANY FOR APPROVAL OF ITS  
STRANDED COST RECOVERY

DOCKET NO. E-01933A-98-0471

**REBUTTAL TESTIMONY OF  
THOMAS BRODERICK  
ON BEHALF OF  
HARQUAHALA GENERATING COMPANY, LLC  
June 11, 2002**

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**REBUTTAL TESTIMONY**  
**OF**  
**THOMAS BRODERICK**  
**HARQUAHALA GENERATING COMPANY, LLC**  
**June 11, 2001**

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Thomas M. Broderick. My business address is 1100 Louisiana, Suite 1650, Houston, Texas 77002. I am Director, External Relations, West Region, PG&E National Energy Group ("NEG"). NEG is the owner of Harquahala Generating Company, LLC ("HGC"), the owner of an approximately 1,040 Mw facility under construction.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS AND EXPERIENCE.

A. A summary of my professional qualifications and experience is included in the Statement of Qualifications attached as Exhibit 1 to this testimony.

Q. HAVE YOU REVIEWED THE TESTIMONY FILED BY THE PARTIES ON THE "TRACK A" ISSUES?

A. I have. Track A concerns one component (asset transfer) of implementing the competitive market structure envisioned under Arizona's Electricity Rules and as embodied in the settlement agreements of Arizona Public Service (APS) and Tucson Electric Power (TEP). For example, under **R14-2-1606(B) of the Arizona Electricity Competition Rules**: "After January 1, 2001, power purchased by an investor owned Utility Distribution Company shall be acquired from the competitive market through prudent, arm's length transactions and with at least 50% through a competitive bid process." And, under the APS settlement, APS agreed that it "[S]hall procure generation for Standard Offer

1 customers from the competitive market as provided for in the Electric Competition rules.  
2 An affiliated generation company formed pursuant to this Section 4.1 may competitively  
3 bid for APS' Standard Offer load, but enjoys no automatic privilege outside of the market  
4 bid on account of its affiliation with APS.”

5 These provisions raise questions with regard to the timing of the implementation  
6 of the asset transfer from the incumbent utility to its affiliated competitive power supplier  
7 as well as to when in this process the bidding for standard offer service should occur. As  
8 contemplated, these two actions are linked, with some arguing that they should occur  
9 simultaneously. However, there is a question as to what that actually means. HGC's  
10 interpretation of these rules is that the competitive procurement of power is to occur prior  
11 to the transfer of assets. Further, meeting the competitive procurement requirement of the  
12 Rules requires that all or nearly 100% of Standard Offer (“SO”) requirements have been  
13 successfully contracted for in a valid competitive procurement process; the mere issuance  
14 of an RFP or a plan to conduct a process is not satisfactory under the Arizona Rules to  
15 permit a transfer of generation assets to affiliates. It is likely that at least some of the  
16 existing APS assets will continue to supply native load after its transfer to Pinnacle West.  
17 Because this involves an affiliate transaction, it is in the best interest of all parties – and  
18 the responsibility of the ACC – to conduct the procurement before a transfer so there is no  
19 question that the process is transparent and does not advantage APS' affiliates.

20  
21  
22  
23 Q. PLEASE ANALYZE FURTHER THE TESTIMONY AND PROVIDE THE REACTION  
24 OF HARQUAHALA GENERATING COMPANY TO IT.

25 A. Yes. The following are our responses to the significant issues raised by the testimony.  
26

1           1.       HGC feels strongly that existing network transmission service rights should **not** be  
2 part of the asset transfer from APS and TEP to their generation affiliates. If the generating  
3 affiliates received the transmission rights, they would be the only parties who could supply a  
4 delivered product in the utility auction. This would presuppose the winner of the competitive  
5 procurement for standard offer service, which is antithetical to the objective of the Electricity  
6 Competition Rules. In short, the generation affiliate would possess market power because, in the  
7 absence of a functioning RTO/ISO, they would be the only entity to have sufficient transmission  
8 to deliver their product. Instead, these rights should be designated for use by APS and TEP in  
9 securing power from the successful bidders for SO service for the duration of their contracts . As  
10 Mr. Kebler states in his testimony, if some of a UDC's generation assets that are transferred to  
11 affiliates are not successful in competition to provide SO service, that transmission should be  
12 available to others.  
13

14  
15           2.       HGC agrees with the recommendation contained in the testimony of Craig R.  
16 Roach that to successfully implement Arizona's Rules, competitive procurement of nearly 100%  
17 of SO requirements must occur **prior** to any asset transfers. This recommendation is valid even if  
18 the selected procurement design results in several rounds of RFP's and/or auctions over a defined  
19 period to competitively procure nearly 100% of SO. Hence, divestiture can occur en masse  
20 following successful contracting with the winning bidders, which will, no doubt, include affiliates  
21 of APS and TEP. As a result, Arizona retail customers will benefit due to compliance with the  
22 Rules.  
23

24           3.       Alternatively, if the Commission waits until after the asset transfer to conduct  
25 competition procurement of generation, it will immediately face the need to approve or accept the  
26

1 price, terms and conditions for the purchase of thousands of Mw from the UDCs' affiliates on an  
2 interim basis without knowing what the competitive market could achieve were it allowed to  
3 operate. It is HGC's opinion that this does not support the ultimate objectives of the Electricity  
4 Competition Rules and the utility settlements – that customers have access to the benefits that  
5 market competition can bring. This scenario is also akin to what APS proposed as part of its  
6 variance last October, and what the Commission stayed.  
7

8 4. The role of must run generation in this process is discussed in detail in the  
9 testimony of Matt Rowell, Jerry Smith and Craig Roach. HGC is generally supportive of their  
10 testimony and believes the RFP-based competition process described by Craig Roach for must  
11 run generation should occur as early in the competitive procurement process as possible and the  
12 market power issues associated with must run generation need to be addressed. Furthermore, the  
13 contracted providers of must run generation should **not** be permitted to use these contracts to  
14 create an advantage when bids are submitted utilizing other resources they own or otherwise  
15 control. The must run generation is readily identifiable for APS and TEP – it is located inside  
16 metropolitan Phoenix, Tucson and Yuma.  
17

18 5. Ideally, the must run RFP would be a component of a comprehensive RFP for all  
19 SO service. This will allow bids for generation inside load pockets to be compared to bids from  
20 outside the load pocket. The latter bids will, in many instances, include the allocated incremental  
21 cost of transmission to bring power into the inside load pockets. Under this approach, a system-  
22 wide, least cost criterion should be applied as the basis for bid selection  
23

24 6. As a practical example of the workability of the procedure I have described,  
25 HGC's owner, National Energy Group ("NEG"), responded to a large RFP from Public Service  
26

1 Company of Colorado ("PSCO") in 1999 that sought generation bids from a variety of locations  
2 both in the Denver load pocket and from remote delivery locations. After literally hundreds, if  
3 not thousands, of computer-modeled scenarios (run overnight) of alternative generation port-  
4 folios, PSCO awarded 12 contracts. NEG was a successful bidder and our newly constructed 111  
5 Mw Plains End peaking facility, which is located inside suburban Denver, achieved commercial  
6 operation last month (May 2002). This was only 28 months after the issuance of the RFP. I note  
7 that other PSCO contracts provide peaking, intermediate and base load power from various  
8 locations inside and outside the load pocket and, in some instances, required significant  
9 transmission infrastructure additions, which were and are still being undertaken by PSCO. In the  
10 case of Plains End, PSCO constructed the necessary transmission infrastructure on time and NEG  
11 is now delivering to PSCO's retail customers as a network designated resource as specified in  
12 PSCO's transmission tariff. In Colorado, PSCO is the control area operator for NEG's facility.  
13 This is a service that APS has refused to provide HGC in Arizona. In other words, through  
14 normal utility resource planning processes, PSCO was able to successfully weigh the advantages  
15 and disadvantages of a large proposed portfolio of potential new generation resources of many  
16 types and locations, both inside and outside load pockets. In some instances, some amount of  
17 existing transmission was available. In other cases, varying amounts of new transmission  
18 infrastructure were identified as cost effective and were or still are being constructed in a timely  
19 manner.  
20  
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22

23 7. Mr. Kebler has proposed a thoughtful and creative means to enhance the market  
24 prior to the competitive solicitation process for SO. Unfortunately, the lack of a functioning RTO  
25 or ISO for APS and TEP leads HGC to conclude that Mr. Kebler's proposal may be premature  
26

1 and the Arizona market structure needs to evolve further first. For similar reasons, the concept of  
2 procuring a "slice of system" product is also premature. HGC would enthusiastically support  
3 revisiting both of these concepts after an RTO or ISO in the area is functioning with features  
4 conducive to a slice of system auction. However, prior to an RTO/ISO, APS and TEP can use  
5 their proprietary knowledge of the transmission system and their market power over the provision  
6 of ancillary services to stifle slice of system competition. Only a very small subset of competitors  
7 has a generation portfolio adequate to offer a slice of system. This would generally limit the pool  
8 of able bidders.

10 8. As an idea to evolve towards, Mr. Kebler's competitive auction proposal would  
11 significantly assist in the establishment of a competitive market structure and thereby improve  
12 market liquidity, reduce incumbent market power and provide the Commission with additional  
13 market benchmark information that would be helpful in evaluating the fairness of contracts  
14 between APS, TEP and their affiliates. NEG and many other generation providers successfully  
15 participated in the Texas capacity auction in 2001. The capacity NEG obtained from this auction  
16 plus the additional ancillary services available daily from the ERCOT ISO augments the single  
17 power plant NEG owns in Texas, thus allowing the company to meet long-term 100% full  
18 requirements of the City of Denton, Texas and other retail customers. In Texas, the services NEG  
19 obtains daily from the ERCOT ISO are critical to establishing a level playing field for the  
20 economics of transactions, especially the cost of energy imbalances. In the case of Arizona,  
21 Craig Roach and Curtis Kebler have recommended the establishment of a short-term energy  
22 market including a real time energy balancing market. This step would be helpful to both  
23 wholesale and retail competition.  
24  
25  
26

1           9.       Unfortunately, absent a fully-functioning RTO/ISO as is the case in Texas, we  
2 believe the market structure is insufficient to support a slice of system auction even with a  
3 capacity auction. While it is possible today for some merchants to provide a slice of service at a  
4 single or a few delivery points, absent an RTO/ISO, it is nearly impossible for a merchant to  
5 provide a true slice of system which covers all major delivery points for all hours of the year.  
6

7           10.       Therefore, HGC recommends APS and TEP utilize an RFP process for soliciting  
8 standard wholesale products – baseload, intermediate, peaking, and ancillary services at multiple  
9 delivery points such as Palo Verde, Mead, Four Corners and other locations where the utilities  
10 have transmission rights or physical utility owned capacity to accept power. It would likewise be  
11 helpful for APS and TEP to indicate preferred transmission locations. Such a process will be  
12 much less complicated, will draw the maximum number of bidders and will result in pricing that  
13 is transparent and easily verifiable. HGC is confident that both APS and TEP have the resource  
14 planning tools, quantitative models and skilled employees to successfully conduct an RFP  
15 process. If an RFP process seeking standard wholesale products is concluded prior to generation  
16 asset transfer as we have recommended, it is critical for the Commission to work closely with an  
17 independent evaluator to ensure that the RFP process is fairly conducted. Hence, this simpler  
18 approach for the time being will enable the retail customers of APS and TEP to reap the benefits  
19 of a “buyers” market in a time frame during which new generation assets are coming on line.  
20

21           11.       HGC disagrees with the statement of Mr. Jack Davis on page 14 of his testimony  
22 that “Divestiture is also the basis for the competitive bidding provision of Rule 1606, which  
23 makes absolutely no sense in its absence.” While HGC does not oppose divestiture per se and  
24 understands that certain details of the competitive bidding process need to be altered in the  
25  
26

1 absence of divestiture, competitive bidding continues to make significant sense even without  
2 divestiture.

3 12. Using APS as an example, the anticipated level of bidding without divestiture  
4 would be significant. Rather than contract with its affiliate, APS would need to bid out  
5 approximately 1,700 Mw before being allowed to contract with either Red Hawk or West Phoenix  
6 5. This is approximately 28% of APS' current peak load. Additionally, APS would need to bid  
7 out load growth, load served under existing wholesale contracts upon their expiration, load served  
8 by generation that is soon to retire, and existing generation identified as having market power.  
9 Load growth alone would increase the total bid by approximately 3% per year. Hence, only 4  
10 years into such a program at least 40% of APS' SO service would be subject to competitive  
11 procurement.  
12

13 13. In fact, each of the categories listed above formed the basis for the Colorado  
14 competitive bidding program. Hence, the Colorado program is much more significant than  
15 simply covering incremental load growth as some have suggested. In Colorado, in more than 3  
16 rounds of RFP bidding, approximately 42% of the SO load of PSCO was contracted with  
17 suppliers, the vast majority to suppliers other than PSCO or its affiliate. Furthermore, PSCO has  
18 not divested and Colorado is not open to retail competition.  
19

20 14. Not only does bidding makes significant sense without divestiture, but the  
21 methods, practices and procedures developed in other states for bidding absent divestiture are  
22 informative and successful.  
23

24 15. ACC Staff testimony recommends a price to beat be established for generation  
25 and, perhaps, for each generation asset, using existing tariffs. The apparent goal of this proposal  
26

1 is to ensure that competitive bidding and the asset transfer do not increase tariffs, including the  
2 PPFAC component, over the next rate cycle. HGC notes that costs of specific generation  
3 facilities, whatever company owns them, will vary significantly around the system average.  
4 Baseload facilities such as the HGC plant are below the system average, whereas peaking  
5 facilities such as NEG's Plains End facility in Denver have costs above the system average.  
6 However, each of these facilities contribute to a least supply portfolio. Hence, an RFP that covers  
7 all or essentially all of APS' and TEP's SO load is the best way for the Commission to ensure that  
8 offers are evaluated on a system-wide and integrated portfolio basis. This approach also allows  
9 the Commission to obtain insights into the overall system revenue requirements for the preferred  
10 portfolio even in comparison to the existing portfolio. The system planning tools that utilities  
11 such as APS and TEP utilize will determine, in fact, the minimum revenue requirement and rate  
12 levels of integrated groups of standard wholesale products. Thus, the Commission can be  
13 confident that this modeling process will identify the least cost alternative without a separate  
14 cumbersome exercise to match and directly compare each selected asset with existing assets and  
15 their component of tariffs. Of course, at some more distant point in the future, tariffs may  
16 increase, but this approach provides the Commission with the comfort that no other portfolio will  
17 result in lower costs. At present, the wholesale market is highly favorable to buyers. For this  
18 reason, the near term price concerns are misplaced. A slice of system product, on the other hand,  
19 forces each bid to assemble all the components of service. In absence of an RTO/ISO, this would  
20 be a more costly scenario. Also note that an RFP solicitation will result in bids from both in-state  
21 and out-of-state generating companies.  
22  
23  
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1           16.     It should also be noted that there is no reasonably current cost of service study by  
2 either APS or TEP, which reconciles the cost components for generation, transmission and  
3 distribution to existing retail tariff levels, let alone one specific to individual power plants. If the  
4 Commission intends to establish a price to beat either by total generation or by asset based on  
5 existing tariffs, we suggest that the Commission ask the utilities to begin preparing this study  
6 immediately. Given APS and TEP rate settlements which are both cost and incentive based, an  
7 attempt to match costs with tariffs is a quagmire best left for consideration until the next rate case.

9           17.     Staff witness Barbara Keene has provided some excellent testimony on affiliate  
10 relationships. However, HGC wonders if one of Ms. Keene's suggestions might create a loophole  
11 that would allow Red Hawk to be transferred to APS without first obtaining Commission  
12 approval of a code of conduct or otherwise be subject to Commission scrutiny. Specifically, she  
13 recommends the code of conduct covers arms length transactions (page 8, line 7, Keene  
14 testimony) and includes as an arms length transaction, the sale or transfer of assets from an  
15 affiliate to the utility (page 8, line 18). Therefore, HGC's concern is that none of the four actions  
16 in Barbara Keene's testimony on page 7, lines 12 through 25, which trigger Commission approval  
17 of a new code of conduct, covers a situation in which APS purchases power from Red Hawk but  
18 only after Red Hawk has been transferred back to APS. Previously, APS/Pinnacle West has  
19 discussed the possibility of transferring Red Hawk to APS. To close the loophole, the  
20 Commission would need to add a fifth "trigger" action covering transfers from an affiliate back to  
21 a UDC.  
22  
23

24           18.     HGC supports Erinn Andreasen's recommendation to form an Electric  
25 Competition Advisory Group and HGC would actively participate in such a group. HGC  
26

1 recommends the Group's scope be expanded to support market/regulation/implementation  
2 monitoring.

3           19.     The TEP proposal to close the retail market for customers under 3 Mw is entirely  
4 unnecessary given the current circumstances.  Indeed, it is a solution in search of a problem.  
5 Moreover, HGC believes it would be difficult, time-consuming, costly, and repetitive to re-open  
6 the market for these customers at a future date.  
7

8 Q.   DOES THE COMMISSION HAVE A ROAD MAP FOR IMPLEMENTING YOUR  
9 NEAR-TERM COMPETITIVE SOLICITATION RECOMMENDATIONS?

10 A.  Yes.  It was filed on March 29, 2002 in the testimony of Mr. Alan Taylor sponsored by  
11 HGC.

12 Q.  DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

13 A.  Yes.  
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**Exhibit 1**

STATEMENT OF QUALIFICATIONS

2001 PG&E NATIONAL ENERGY GROUP, Houston, Texas

Thomas Broderick is Director External Relations, West Region for PG&E National Energy Group. He is responsible for regulatory, legislative and community relations. His current efforts are concentrated in Arizona, Colorado, and Louisiana where the Company has power plant projects or competitive bidding is planned or underway.

1999 - 2000 U.S. STATE DEPARTMENT /USAID, Kiev, Ukraine and Washington, D.C.

- Senior Energy Advisor

1997 - 1998 PG&E ENERGY SERVICES CORPORATION, Scottsdale, Arizona

- Energy Consultant

1984 - 1996 ARIZONA PUBLIC SERVICE COMPANY

- Planning Manager
- Supervisor, Forecasts
- Supervisor, Regulatory Affairs
- Economist, Regulatory Affairs

1982 - 1984 MILLER BREWING COMPANY, Milwaukee

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1981 ILLINOIS HEALTH FINANCE REGULATORY AUTHORITY, State of Illinois, Chicago

- Regulatory Economist