

ORIGINAL



0000062913

MEMORANDUM

30

TO: Docket Control

FROM: Ernest G. Johnson  
Director  
Utilities Division

DATE: December 18, 2006

RE: IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY -  
APPLICATION FOR AUTHORIZATION TO ACQUIRE POWER PLANT  
(DOCKET NO. E-01345A-06-0464)

Attached is the Staff Report for the above Application requesting that the Commission authorize the Company to acquire a new generation resource within the Company's Yuma load pocket either through direct contracts with vendors and contractors or through a contract with a developer.

Staff is recommending approval of the Application.

EGJ: MJR:tdp

Originator: Matthew Rowell

Arizona Corporation Commission  
DOCKETED  
DEC 18 2006

DOCKETED BY	
-------------	---

AZ CORP COMMISSION  
DOCUMENT CONTROL

2006 DEC 18 P 12:25

RECEIVED

SERVICE LIST FOR: Arizona Public Service Company  
DOCKET NO. E-01345A-06-0464

Mr. Bill Murphy  
5401 North 25<sup>th</sup> Street  
Phoenix, Arizona 85016

Arizona Reporting Service, Inc.  
2627 North Third Street  
Phoenix, Arizona 85004-1126

Mr. Greg Patterson  
916 West Adams  
Phoenix, Arizona 85007

Mr. Jay Moyes  
1850 North Central Avenue Suite 1100  
Phoenix, Arizona 85004

Mr. Theodore Roberts  
101 Ash Street, HQ 13D  
San Diego, California 92101-3017

Mr. Lawrence Robertson, Jr.  
Munger Chadwick  
Post Office Box 1448  
Tubac, Arizona 85646

Mr. Thomas Mumaw  
Post Office Box 53999 MS 8695  
Phoenix, Arizona 85072-3999

Ms. Karilee Ramaley  
400 North 5<sup>th</sup> Street  
Phoenix, Arizona 85004

Mr. Christopher C. Kempsey  
Chief, Legal Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Mr. Ernest G. Johnson  
Director, Utilities Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Ms. Lyn Farmer  
Chief, Hearing Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION

ARIZONA PUBLIC SERVICE COMPANY  
DOCKET NO. E-01345A-06-0464

IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY – APPLICATION FOR  
AUTHORIZATION TO ACQUIRE POWER PLANT

December 18, 2006

## STAFF ACKNOWLEDGMENT

The Staff Report for APS Docket No. E-01345A-06-0464 was the responsibility of the Staff member listed below. Matthew Rowell reviewed APS' RFP, responses to the RFP and APS' evaluation process.

A handwritten signature in black ink, appearing to read "Matthew Rowell", is written over a horizontal line.

Matthew Rowell  
Chief Economist

**EXECUTIVE SUMMARY**  
**ARIZONA PUBLIC SERVICE COMPANY**  
**DOCKET NO. E-01345A-06-0464**

On July 14, 2006 Arizona Public Service Company ("APS") filed a request for authorization to acquire a new generation resource within the Yuma load pocket either through direct contracts with vendors and contractors or through a contract with a developer. APS filed this request because it believes that a self build option is the most economical way to meet the growing demand for power in the Yuma area and Decision No. 67744 prohibits APS from pursuing a self build option without Commission approval. Staff has reviewed the RFP APS issued for the acquisition of resources to serve the Yuma area, the responses to the RFP and APS' evaluation of the responses. Staff recommends approval of APS' application.

**TABLE OF CONTENTS**

	<u>Page</u>
1. INTRODUCTION.....	1
2. DECISION NO. 67744.....	1
3. THE YUMA LOAD POCKET .....	3
4. THE RFP PROCESS.....	3
5. STAFF RECOMMENDATION .....	5
6. OTHER ISSUES .....	6

## 1. INTRODUCTION

On July 14, 2006 Arizona Public Service Company ("APS") filed a request for authorization to acquire a new generation resource within the Yuma load pocket either through direct contracts with vendors and contractors or through a contract with a developer. APS filed this request because it believes that a self build option is the most economical way to meet the growing demand for power in the Yuma area and Decision No. 67744 prohibits APS from pursuing a self build option without Commission approval.

At this time APS is not seeking any ratemaking or prudence determination regarding the new generation in the Yuma area. APS represents that it plans on seeking rate treatment for the new Yuma generation in a future rate case.

## 2. DECISION NO. 67744

Decision No. 67744 approved (as modified) the Settlement Agreement between APS, Commission Staff, and a wide variety of other parties to APS' June 2003 rate case filing. Paragraph 74 of the Settlement Agreement contains the relevant requirements for this proceeding: "APS will not pursue any self-build option having an in service date prior to January 1, 2015, unless expressly authorized by the Commission." The rest of paragraph 74 includes certain exemptions from this requirement which were modified by the Commission in Finding of Fact 33 of Decision No. 67744.<sup>1</sup> With or without the Commission's modification to the Settlement Agreement, Staff believes that both options APS has identified for new generation in the Yuma area are self build option and thus require Commission approval.

The Settlement Agreement and Decision No. 67744 did include a delineation of what an application before the Commission by APS for self build authority should include (see paragraph 75 of the Settlement Agreement.) APS' July 13, 2006 application combined with APS' responses to Staff's data requests lead Staff to believe that APS is making a good faith effort to comply with the requirements of Decision No. 67744. Additionally, Staff believes there is enough information contained within the application and the responses to Staff's data requests to make an informed recommendation to the Commission.

Paragraph 75 of the Settlement Agreement delineated subject areas which any APS request for self build must address. Those subject areas and Staff's assessment of how APS' current application satisfies them are as follows:

---

<sup>1</sup> The exemptions identified in the settlement agreement are as follows: "Self build does not include the acquisition of a generating unit or interest in a generating unit from a non-affiliated merchant or utility generator, the acquisition of temporary generation needed for system reliability, distributed generation of less than fifty MW per location, renewable resources, or the up-rating of APS generation, which up-rating shall not include the installation of new units." Finding of Fact 33 of Decision No. 67744 altered these exemptions such that the definition of "self build" does include "the acquisition of a generating unit or interest in a generating unit from any merchant or utility generator..."

- a. The Company's specific unmet needs for additional long-term resources.

Exhibit A to APS' application specifies the unmet needs for additional resources APS anticipates over the next several years. The application, the RFP, and the confidential material provided in response to Staff's data request contain additional information regarding APS' unmet needs.

- b. The Company's efforts to secure adequate and reasonably-priced long-term resources from the competitive wholesale market to meet these needs.

APS' application contains a description of the process APS went through in issuing the RFP and evaluating responses to the RFP. Confidential material provided in response to Staff's data requests contained detailed information regarding the responses to the RFP and APS' evaluation of those responses.

- c. The reasons why APS believes those efforts have been unsuccessful, either in whole or in part.

APS application indicates that the bids for Purchase Power Agreements ("PPAs") were substantially more expensive than the bids for generation asset sales and APS' own self build option.

- d. The extent to which the request to self-build generation is consistent with any applicable Company resource plans and competitive resource acquisition rules or orders resulting from the workshop/rulemaking proceeding described in paragraph 79 (of the Settlement Agreement.)

Paragraph 79 of the Settlement Agreement required Staff to hold workshops and possibly initiate a rulemaking proceeding on resource planning and competitive procurement issues. A generic docket has been opened to address these issues (Docket No. E-00000E-05-0431) and workshops have been held. However, the workshop process is not complete and there currently are no applicable Company resource plans or competitive resource acquisition rules or orders resulting from the workshop/rulemaking proceeding.

- e. The anticipated life-cycle cost of the proposed self-build option in comparison with suitable alternatives available from the competitive market for a comparable period of time.

The confidential information provided in response to Staff's data requests included detailed cost comparisons of all of the bids APS received as well as to APS' self build option.

### 3. THE YUMA LOAD POCKET

The Yuma area is currently a Load Pocket. Essentially, this means that the total peak demand exceeds the total transmission import capability. This necessitates running local generation during peak periods. This also means that growth in peak load must be accommodated through local generation.

APS' forecasts indicate that the Yuma area's peak load will grow such that it will exceed total available resources (transmission import capacity and local generation) in 2008. Because the transmission import capacity is already fully utilized during peak periods, this peak load growth will need to be served with local generation. Exhibit A to APS' application summarized the forecasted peak load and available resources in the Yuma area and is reproduced as Table 1 below.

**Table 1: Yuma Area Forecasted Loads and Resources**

	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Load Requirements with Reserves</b>	499	519	539	559
<b>Existing APS Generation and Transmission</b>	351	351	351	351
<b>Existing 3<sup>rd</sup> Party Resources</b>	167	162	165	167
<b>Total Resources</b>	<b>518</b>	<b>513</b>	<b>516</b>	<b>518</b>
<b>Resources Over/(Under) Need</b>	<b>19</b>	<b>(6)</b>	<b>(23)</b>	<b>(41)</b>

Staff did review APS' forecasting methodology as part of this case. However, because APS is not seeking cost recovery at this time, Staff does not believe that an assessment of APS' forecasting is necessary or appropriate at this time. Such an assessment of APS' forecasting methodology would be appropriate in the context of a prudence review for ratemaking purposes. Providing an assessment at this time may inappropriately prejudice a future prudence review.

### 4. THE RFP PROCESS

APS represents that their forecasts first indicated a likely resource shortfall in the Yuma area in the summer of 2005. In response to this forecasted shortfall APS issued an RFP for generation resources in the Yuma area on September 19, 2005 ("the Yuma RFP.") The RFP had the following characteristics:

1. The RFP specified a need between 100 and 200 MW of capacity.

2. The generation had to be deliverable inside the Yuma Load pocket.
3. The generation needed an in-service date between June 1, 2006 and June 1, 2008.
4. Any proposed purchased power agreements had to be at least 10 years in duration (because the transmission constraint is not expected to be alleviated soon.)
5. Multiple units were identified as preferable to a single large unit for reliability reasons.
6. APS' Yucca Power Plant site was offered as a potential site for any new generation, but the RFP indicated that it should not be inferred that the Yucca site was preferred by APS.
7. APS offered to take the lead in procuring the necessary gas transportation capacity necessary for a gas fired plant(s) at the Yucca location.
8. APS initiated interconnection requests at Yucca that would be made available to a winning bidder if the Yucca site was selected.

APS hosted a bidders' teleconference on September 21, 2005 and a tour of the Yucca site on September 27, 2005. Given that 21 entities participated in the teleconference and six entities attended the site tour, it appears to Staff that the RFP was well publicized. Further, in response to the RFP, APS received 25 proposals from 11 different entities. This is further indication that the RFP was well publicized. The proposals included offers to build and sell generating units to APS, offers to build generating units and sell APS power through a multi-year purchase power agreement ("PPA"), and hybrids of those two approaches.

Essentially, APS used a three phase approach to evaluating the proposals. First APS used a reliability based screen to eliminate proposals that did not meet specific reliability requirements. The remaining proposals were then evaluated based on their cost characteristics and a short list was developed. APS used a standard Busbar cost analysis for this part of the evaluation. Once the short list was determined APS met with each company on the short list and allowed them to refresh their bids.

Staff's review of APS' reliability based screen found that it was straightforward and that it was applied consistently to each of the proposals. The reliability screen essentially eliminated any project with a loss of load probability ("LOLP") worse than one outage in 10 years. APS' assessment of LOLP was based on their knowledge of each of the proposed technologies. The technologies proposed by the bidders were largely "off the shelf;" that is, bidders proposed to build generators that are currently readily available from suppliers and that are currently in use (except for GE LMS 100.) Thus APS had access to actual data on which to base their LOLP assessments. Several proposals were eliminated based on reliability concerns.

The different technologies proposed by the bidders are summarized in table 2.

**Table 2: Proposed Technologies**

<b>Technology</b>	<b>Number of Proposals</b>
GE LM 6000	10
GE 7EA	5
GE LMS100	1
Wartsila 20V34SG	6
IC Oil (Distributed)	1
CC/Solar	1
Siemens Westinghouse 5000F	1

After its initial reliability and economic analysis, APS selected 12 proposals from 5 entities for its short list. These 5 bidders were afforded the opportunity to refresh their bids. The analysis of these 12 bids essentially consisted of the calculation of the net present value (NPV) over 30 years of the cost to APS of each proposal. The NPV analysis identified one proposal as being clearly superior to the others on a cost basis.

Staff's review of APS' evaluation process revealed no irregularities. It appears to Staff that APS transferred the cost data from the bidder supplied material in to its evaluation documents and spreadsheets accurately. It also appears that the bids were treated fairly and equitably; that is, APS used a consistent methodology to calculate the NPV and busbar cost of each bid. (Of course the methodology had to be altered somewhat depending on whether a generator purchase or a PPA was being evaluated.)

## **5. STAFF RECOMMENDATION**

The proposal selected by APS as superior to the others is a proposal to build two GE LM 6000 units at the Yucca Power Plant site and sell them to APS upon their completion. This project has a total capacity of 96 MW.

APS is seeking Commission authorization to either purchase the two GE LM 6000 units from the developer who made this proposal *or* contract directly with equipment suppliers and contracts to have two APS owned GE LM 6000 units built. Staff believes that APS' request is reasonable and recommends that the Commission issue an order authorizing APS to pursue either of these two options. Allowing APS the option to build the plants themselves without the developer's involvement will provide APS with leverage in its negotiations with the developer that may result in the developer reducing its price. Without the self build option available, APS would have little leverage in negotiations with a developer and a higher than necessary price could be imposed on APS and eventually its customers.

Staff's recommendation is based on its review of an extensive amount of confidential information provided by APS that identified the ownership of two GE LM 6000 units as the least

cost option for meeting peak demand in the Yuma area. In order to insure that the actual cost of building or buying these plants does not exceed the costs identified in the information provided to Staff, Staff recommends that the same information provided by APS in this case to justify its selection of the self build option be made available to Staff during any future case where the new plants in the Yuma area are being considered for ratemaking treatment.

## **6. OTHER ISSUES**

Because the Yuma area is a load pocket, all of the responses to the RFP had to include new generation within the Yuma area. For practical reasons there are only two locations in the Yuma area that can facility generators of the size needed to meet APS' needs. APS' needs in the Yuma area are limited to peaking generation. These three factors greatly limited the options available to responders to the Yuma RFP. When responding to more general RFPs (such as the "Reliability RFP" issued by APS in May 2005) a wide variety of different options can be proposed. Proposals can include new or existing generation or a combination of both. Proposals can include generation resources that are widely distributed geographically.

Because of the limited nature of the Yuma RFP, the technical aspects of the proposals received were necessarily similar to each other (and to APS' self build option.) For this reason, evaluation of these proposals was more straightforward than what would be necessary for a more general RFP. For instance, comparing two proposals for new peaking plants at one site is quite a bit simpler than comparing two proposals for plants that are greatly separated geographically (because, for example, the later instance would include significant transmission issues.)

This relative simplicity of the Yuma RFP compared to other more general RFPs, causes Staff to warn against any party perceiving this case to be a good indicator of how a future case would progress should APS seek authority to self build after evaluating the results of a more general RFP.