



0000091179

ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION RECEIVED

MARC SPITZER  
CHAIRMAN  
JIM IRVIN  
COMMISSIONER  
WILLIAM A. MUNDELL  
COMMISSIONER  
JEFF HATCH-MILLER  
COMMISSIONER  
MIKE GLEASON  
COMMISSIONER

Arizona Corporation Commission

DOCKETED

MAY 30 2003

2003 MAY 30 P 3: 11

AZ CORP COMMISSION  
DOCUMENT CONTROL

DOCKETED BY

In the matter of the Application of Salt  
River Project Agricultural Improvement and  
Power District in conformance with the  
requirements of Arizona Revised Statutes  
Sections 40-360-03 and 40-360.06, for a  
Certificate of Environmental Compatibility  
authorizing the Expansion of its Santan  
Generating Station, located at the intersection  
of Warner Road and Val Vista Drive, in  
Gilbert, Arizona.

Case No. 105

Docket No. L-00000B-00-0105

**SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT  
AND POWER DISTRICT'S APPLICATION FOR AMENDMENT TO  
DECISION NO. 63611**

**Preliminary Statement**

This is an application by the Salt River Project Agricultural Improvement and Power District ("SRP") to amend the Commission's order approving the Certificate of Environmental Compatibility ("CEC") for the Santan Expansion Project (Decision Number 63611, dated May 1, 2001). Specifically, this application seeks only to amend the Commission-imposed condition number 36, in order to permit SRP to use ultra-low sulfur fuel, in emergency situations only, in the *existing* Santan units (the new units under construction are not capable of using alternate fuels). This change will conform

1 the CEC condition with the proposed new Maricopa County Air Pollution Control  
2 Regulations, Rule 322.

3 This change will be fully protective of air quality and, to SRP's knowledge, will  
4 allow the existing Santan units to be the first major generating facility in the nation to  
5 use this new, clean fuel. But more importantly, in light of the increasing risk of natural  
6 gas curtailments and shortages, including recent FERC actions that put Arizona's  
7 natural gas supplies at risk, this change will significantly improve the reliability of the  
8 electric system in the Valley. The change will also help SRP in meeting its Homeland  
9 Security objectives, as it addresses Central Arizona's vulnerability of being served by a  
10 single source of natural gas supply, providing an alternate means of assuring supply  
11 and voltage support in the Valley. The environmental impacts of the change will be  
12 insignificant. For the reasons set forth in this application, SRP respectfully requests that  
13 the Commission modify condition number 36.

14 **This Application is Properly Before the Commission**

15 The statutes pertaining to the environmental siting of power plants and  
16 transmission lines do not directly address the situation where an applicant seeks to  
17 modify a condition, whether imposed by the Siting Committee or the Commission. Nor  
18 is this situation directly addressed by the Commission rules. However, examining the  
19 general layout of the statutory authorities, and given the fact that this particular condition  
20 was imposed by the Commission, not the Siting Committee, a direct application to the  
21 Commission is appropriate.

22 In reaching this conclusion we first look at the general structure of the siting  
23 process in Arizona. Under the provisions of A.R.S. §40-360.01 *et seq.* the siting of  
24 facilities is a two-step process. First, under A.R.S. §40-360.04(D) and 40-360.06(A)  
25 the Siting Committee issues a Certificate of Environmental Compatibility, following an

1 application and hearing before the Committee. In issuing the CEC, the Committee may  
2 impose specific conditions relating to mitigation of environmental impact (A.R.S. §40-  
3 360.06).

4 The second step is that the Commission must “affirm and approve” the CEC.  
5 A.R.S. §40-360.07. In carrying out this second step the Commission has plenary  
6 authority, upon timely request for review of the Siting Committee determination, to  
7 “confirm, deny or modify any certificate granted by the committee, or in the event the  
8 committee refused to grant a certificate, the commission may issue a certificate to the  
9 applicant”. A.R.S. §40-360.07B.

10 Here, the CEC was issued by the Siting Committee on February 14, 2001. SRP  
11 does not seek to change any part of the CEC, as it was issued by the Siting Committee.  
12 Rather, SRP seeks to modify a separate Commission order that was issued by the  
13 Commission under its own independent authority, as set forth in A.R.S. §40-360.07B.  
14 Thus, SRP is making an application to the Commission to modify an order of the  
15 Commission. A direct application to the Commission is the precise process that is  
16 envisioned under A.R.S. §40-252 where the applicant seeks to modify a Commission  
17 order<sup>1</sup>:

18 The commission may at any time, upon notice to the corporation affected, and  
19 after opportunity to be heard as upon a complaint, rescind, alter or amend any  
order or decision made by it.

20 This is also the process that has been followed in other cases, both where the  
21 applicant sought to modify a Commission order and where the applicant sought to  
22 modify a Siting Committee CEC condition. For example:

---

24  
25 <sup>1</sup> Though not at issue here, because of the Commission’s broad authority to modify CECs under A.R.S. §  
40-360.07, and the Commission’s authority to modify its orders under A.R.S. 40-252, it is clear that the  
Commission has at least the discretionary jurisdiction to hear any application, whether it seeks to change  
a CEC condition or a Commission-imposed condition.

1           TEP Springerville Units 3 & 4 - Cases 30 and 74, Decisions 65347  
2           (11/1/02) and 48313 and 55477 (This case addressed a Commission  
3           finding of "need" for Springerville Unit 4 and a request that the CEC be  
4           reopened. By stipulation this case was heard by the Commission.)

5           TEP transmission line from Tortolita - Case 39, Decisions 65482  
6           (12/23/02) and 49715 (2/20/79) (This case was referred by the  
7           Commission to the Siting Committee for a hearing as the Commission  
8           determined that the application sought an amendment to the Siting  
9           Committee's CEC conditions, not to the Commission order.)

10          PG&E Harquahala Plant - Case 96, Decisions 65654 (2/20/03) and 62996  
11          (11/3/00) (The case was referred to the Siting Committee as it involved  
12          Siting Committee CEC issues of stack heights, number of units and  
13          nameplate ratings.)

14          APS transmission line from Panda Gila River Plant - Case 102, Decisions  
15          63777 (6/15/01) and 62960 (10/16/00) (APS requested a change in the  
16          switchyard location. Commission staff indicated no objection, and the  
17          matter was decided by the Commission at open meeting.)

18          Duke Arlington Plant - Case 117, Decisions 64717 (4/12/02), 64495  
19          (2/14/02) and 64357 (1/15/02) (Duke filed a request for rehearing to  
20          modify the Commission-imposed condition that would require Duke to  
21          install a dry-cooled plant. The request was handled by the Commission at  
22          open meeting.)

23                 Consistent with the Commission's clear authority, and consistent with past  
24                 Commission practices, SRP respectfully requests that the Commission set this matter  
25                 for hearing through the Commission's Hearing Division.

### Argument

#### **I.     Description of the Santan Generating Station**

          Prior to the application in this Siting Committee docket, the Santan Generating  
Station consisted of four-combined cycle generating units having a combined capacity  
of approximately 360 MW. Each of the four units was constructed to operate on dual  
fuels, natural gas and diesel fuel. The natural gas was provided by way of a pipeline  
generally connecting to the El Paso line near the site of the Kyrene Generating Station  
in Tempe. The diesel fuel was stored in three large on-site tanks, and could be

1 delivered by truck or rail. Diesel fuel was used when natural gas supplies were not  
2 reasonably available.

3 In 2000, SRP made application to the Siting Committee for authority to expand  
4 the existing generation capacity at Santan by adding three new combined cycle natural  
5 gas units. As part of the application, SRP proposed to remove two of the three existing  
6 fuel tanks, recognizing that diesel fuel would be used only as a backup fuel source.  
7 SRP did not propose that the new units have the capability to operate on diesel fuel as  
8 a back up source (and in fact the new units will not have this capability). The new units  
9 are currently under construction. The first two units (which are collectively designated  
10 as Santan Unit 5, as they are configured as a "two on one" unit) are expected to be in  
11 commercial operation in the summer of 2005.

## 12 **II. The SRP Resolution on Diesel Fuel**

13 During the summer of 2001 SRP engaged in a reconsideration of its fuel plans  
14 for its Valley generating plants. While diesel fuel was generally used as a backup fuel,  
15 SRP began limiting the use of diesel fuel except as needed in emergency situations. To  
16 help alleviate concerns about diesel fuel, the SRP Board of Directors, on July 2, 2001,  
17 adopted a Valley-wide policy on the use of diesel fuel in its plants. Note that this action  
18 by the SRP Board roughly coincided with the restrictions placed by the Commission on  
19 the use of diesel fuel in the existing Santan units (discussed below). In relevant part the  
20 July 2, 2001 Board of Directors' Policy provides that Oil will be burned in the Valley only  
21 when SRP's supply of natural gas has been disrupted and/or curtailed. This resolution  
22 of the SRP Board continues to be in effect today.

## 23 **III. The CEC Order and the Commission Approval**

24 On February 14, 2001, the Siting Committee issued a CEC for the Santan  
25 Expansion Project. In April, 2001, the CEC came before the Commission for approval at

1 open meeting under the provisions of A.R.S. §40-360.07. During a two-day open meeting,  
2 the Commission imposed seven additional conditions. These included new condition  
3 number 36 which banned the use of any type of diesel fuel in the existing Santan Units:

4           36. Due to the plant's location in a non-attainment area,  
5           the Applicant shall not use diesel fuel in the operation of any  
6           combustion turbine or heat recovery steam generator  
7           located at the plant.

#### 8 **IV. Increased Natural Gas Risks**

9           Since the date of the Santan CEC order, the risk that natural gas supplies may  
10          be curtailed has materially increased. As is well known at the Commission, Central and  
11          Southern Arizona is served by a single company and largely by a single set of natural  
12          gas pipelines. Originating in West Texas and Northern New Mexico, these pipelines  
13          serve parts of New Mexico, most of Arizona, and a great deal of Southern California.  
14          Because of the captive service status, there has always been a degree of risk of natural  
15          gas curtailment for all of Central and Southern Arizona.

16          However, at the time of the Santan open meetings before the Commission (April  
17          25 and 26, 2001) SRP was operating under a settlement that was reached with El Paso  
18          Natural Gas in 1996. Under the settlement, customers that were "East of California"  
19          were guaranteed "full requirements" service. This meant that as demand for natural gas  
20          grew, the Arizona utilities would continue to receive full supplies. The customers in  
21          California were limited to contract demands that specified maximum daily delivery  
22          amounts.

23          Because of the recent explosive growth in the demand for natural gas in Arizona,  
24          particularly related to the new gas fired generating plants, California customers  
25          complained to the Federal Energy Regulatory Commission about the inequity of the  
26          settlement agreement. FERC ultimately set up a timetable for El Paso Natural Gas to  
27          convert all of its East of California customers to "contract demand" status.

1           Currently the East of California customers are scheduled to convert to contract  
2 demand status on September 1, 2003. The FERC change has set off a scramble to  
3 define the total pipeline capacity. Depending on the definition of pipeline capacity, and  
4 the status of future gas use and growth, SRP may find itself, at least at times, deficient  
5 in summer pipeline capacity. SRP may be forced to seek additional pipeline capacity  
6 (at times of heavy use) from other East of California or California customers.

7           Today there is no robust market for trading pipeline capacity. Although SRP and  
8 other utilities will diligently continue to pursue the availability of additional pipeline  
9 capacity, there clearly is now an increased risk that gas transportation services may be  
10 curtailed to SRP (and other customers on the El Paso pipeline) during periods of peak  
11 use.

## 12 **V. Homeland Security Concerns**

13           On July 16, 2002 the President issued the *National Strategy for Homeland*  
14 *Security*, through the newly created Department of Homeland Security. This report sets  
15 out the basic strategy for federal, state and local governments, and the private sector, to  
16 better protect the country against threats posed by terrorists. This comprehensive plan  
17 identifies broad areas for concentration, including protecting critical infrastructure, such  
18 as the electric grid.

19           The electric industry has responded to the directives of the National Strategy for  
20 Homeland Security, in part, through the North American Electric Reliability Council  
21 (NERC). In *The Electric Sector Response to the Critical Infrastructure Protection*  
22 *Challenge*, NERC lays out the general challenge:

23           The application of new technologies, and the changing political and social  
24 landscape around the world have multiplied threats and vulnerabilities — both  
25 physical and cyber, both electric and electronic. The nature and extent of these  
threats to reliable service, however, are further magnified by new and growing  
national and international tensions. The September 11, 2001, terrorist attacks on  
the World Trade Center and the Pentagon had far reaching impacts on services

1 and systems that underpin every aspect of our lives. The Department of  
2 Commerce's Critical Infrastructure Assurance Office recently noted, "That the  
3 loss of telecommunications services can impede financial service transactions  
4 and delivery of electric power is no longer an exercise scenario. There can be no  
5 e-commerce without 'e' electricity."

6 The NERC report lays out an objective for the electric industry to assess and  
7 improve the overall reliability of electricity supply and delivery systems:

8 For good business reasons, as well as considerations of national security,  
9 individual institutions will need to respond to these threats by managing and  
10 appropriately protecting their own systems and their connections to others, to  
11 assure reliability and integrity of the North American electric transmission systems  
12 and to maintain public confidence in them. Assessment of risk to these electricity  
13 supply and delivery systems will need to include consideration of dependencies on  
14 others, and enhanced protection will need to include enhanced cooperation with  
15 others.

16 As SRP assesses its response to the Homeland Security directives, it becomes  
17 clear that a particular area of vulnerability is the fact that central Arizona is served by a  
18 single natural gas pipeline system. The ability to respond to a disruption of supply,  
19 through the emergency use of alternative fuels, will be a part of the SRP response.

#### 20 **VI. Action by the Maricopa County**

21 Maricopa County is currently in the process of adopting new Air Pollution Control  
22 Regulations. The purpose of the new rules are to comprehensively "address fuel  
23 burning equipment from power plant operations and industrial, commercial or  
24 institutional . . . sources." Specifically the county is proposing two new rules, Rules 322  
25 and 323, that are designed to meet federal "BACT" (Best Available Control Technology)  
for these facilities in Maricopa County.

Proposed Rule 322 relates to facilities constructed before May, 1996 (this would  
include the existing Santan Units). The rule mandates the use of natural gas, but  
recognizes that there will be emergency situations in which the unavailability of natural

1 gas will force the use of diesel fuel. The rule addresses these “emergency” situations in  
2 a comprehensive manner.

3 The proposed rule begins by defining “emergency fuel”:

4 211 EMERGENCY FUEL - Fuel fired only during circumstances such as natural gas  
5 emergency, natural gas curtailment, or breakdown of delivery system such as an  
6 unavoidable interruption of supply that makes it impossible to fire natural gas in the unit.  
7 Fuel is not considered emergency fuel if it is used to avoid either peak demand charges  
8 or high gas prices during on-peak price periods or due to a voluntary reduction in natural  
9 gas usage by the power company.

8 The rule then defines a “natural gas curtailment”:

9 220 NATURAL GAS CURTAILMENT - An interruption in natural gas service, such  
10 that the daily fuel needs of a combustion unit cannot be met with natural gas available  
11 due to one of the following reasons, beyond the control of the owner or operator:  
12 a. An unforeseeable failure or malfunction, not resulting from an intentional act or  
13 omission that the governing state, federal or local agency finds to be due to an  
14 act of gross negligence on the part of the owner or operator; or  
15 b. A natural disaster; or  
16 c. The natural gas is curtailed pursuant to governing state, federal or local agency  
17 rules or orders; or  
18 d. The serving natural gas supplier provides notice to the owner or operator that,  
19 with forecasted natural gas supplies and demands, natural gas service is  
20 expected to be curtailed pursuant to governing state, federal or local agency  
21 rules or orders.

16 Finally, generating units are restricted to the use of natural gas except in “emergency  
17 situations” (including up to 36 hours for testing and maintenance) as defined by the rule:

18 301. 1 Fuel Type: An owner or operator of any combustion equipment listed in Section  
19 102 shall burn only natural gas except when firing emergency fuel per subsection 104.2  
20 and 104.3 of this rule.

21 104.2 All equipment listed in Section 102 fired with an emergency fuel that is normally  
22 fired with natural gas is exempt from Sections 304 and 305 and subsections 301.1,  
23 306.4, 401.4, and 501.4 of this rule.

24 104.3 All equipment listed in Section 102 shall be exempt from Sections 304 and 305  
25 and subsections 301.1, 306.4, 401.4, and 501.4 of this rule for 36 cumulative hrs. of  
firing emergency fuel per year, per unit for testing, reliability, training, and maintenance  
purposes.

1 It is expected that these new regulations will be adopted by the County Board of  
2 Supervisors on July 2, 2003.

3 **VII. Availability of a new ultra low emissions fuel**

4 SRP proposes to use a new fuel known as "ultra low sulfur fuel". Over the past  
5 several years there have been significant improvements in the grades of diesel fuel that  
6 are commercially available. The grade of these available fuels has progressed from  
7 "Low Sulfur Diesel", to "CARB Diesel<sup>2</sup>", and recently to "Ultra Low Sulfur Fuel". Ultra  
8 Low Sulfur Fuel is the cleanest diesel fuel currently available on the market. It is the  
9 highest grade of diesel fuel that SRP proposes to use in emergency situations.

10 The key advantage of this new fuel is its low sulfur content. The current limit on  
11 diesel fuel sulfur content in the United States is 500 parts per million (ppm). According  
12 to the United States Department of Energy, the average sulfur content of diesel fuel in  
13 the United States ranges from 300 to 350 ppm. Even in California, which has adopted  
14 strict emissions standards for diesel engines, the average sulfur content of diesel fuel is  
15 about 120 ppm.

16 The Ultra Low Sulfur Fuel proposed for use by SRP contains only 15 ppm sulfur.  
17 As a result, the SO<sub>2</sub> emissions generated by the use of this fuel would be minimal. In  
18 fact, SRP has determined that the hourly mass emission rate of SO<sub>2</sub> would be *lower* if  
19 the existing turbines were fired on Ultra Low Sulfur Fuel than if these units were fueled  
20 with natural gas. The use of Ultra Low Sulfur Fuel could also result in a reduction in  
21 emissions of nitrogen oxides as compared to the use of typical diesel fuel, as a result of  
22 ultralow sulfur fuel having a lower nitrogen content.

23  
24  
25  

---

<sup>2</sup> Meeting the standards of the California Air Resources Board.

1 **VIII. SRP's County Air Permit**

2 Currently SRP's County air permit does not permit the use of "emergency fuel"  
3 in the existing Santan Units. Contemporaneously with this Application, SRP will  
4 request a modification of its Maricopa County air permit, to permit the use of ultra low  
5 sulfur fuel under emergency conditions (per the new county rule). In the event that the  
6 Commission does not change condition 36 as requested herein, SRP will withdraw its  
7 request to modify its air permit.

8 **IX. SRP's Proposal to the Commission**

9 Based on the foregoing, SRP respectfully requests that the Commission amend  
10 condition 36 to track the new Maricopa County Air Pollution Control Regulations, as they  
11 may be modified or amended. Additionally, SRP will accept a more restrictive condition  
12 that limits the use of "emergency fuel" to "ultra low sulfur fuel". Specifically, SRP suggests  
13 this modification of condition 36:

14  
15 36. SRP shall not use any fuel other than natural gas to operate any of the  
16 electrical generating facilities at the Santan location, except for the use of  
17 "emergency fuel" in the existing units (Santan 1 through 4) as permitted by  
18 Maricopa County Air Pollution Control Regulations, Rule 322, as it may be  
19 adopted and amended from time to time. For purposes of this condition,  
20 "emergency fuel" shall be limited to ultra low sulfur diesel fuel.

21 For the reasons stated above SRP respectfully requests that the Commission enter  
22 an order amending its condition 36 as suggested in this application.

23 DATED this 30<sup>th</sup> day of May, 2003.

24 JENNINGS, STROUSS & SALMON, P.L.C.

25 By: 

Kenneth C. Sundlof, Jr.  
The Collier Center  
201 E. Washington Street, Suite 1100  
Phoenix, AZ 85004  
Attorneys for Salt River Project

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

ORIGINAL and 10 COPIES of the foregoing hand-delivered to Docket Control, this 30<sup>th</sup> day of May, 2003

COPY of the foregoing hand-delivered this 30<sup>th</sup> day of May, 2003, to:

Janice Alward  
Teena Wolfe  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, AZ 85007

Arizona Corporation Commission  
Hearing Division  
1200 W. Washington  
Phoenix, AZ 85007

COPY of the foregoing mailed this 30<sup>th</sup> day of May, 2003, to:

Walter Meek, President  
AUIA  
2100 N. Central Avenue, Suite 210  
Phoenix, AZ 85004

Timothy M. Hogan  
Arizona Center for Law in the Public Interest  
202 E. McDowell Road, Suite 153  
Phoenix, AZ 85004-4533

Mark Sequeira  
2236 E. Saratoga Street  
Gilbert, AZ 85296

Cathy Lopez  
16618 S. 30<sup>th</sup> Dr.  
Phoenix, AZ 85045

Michael Apergis  
637 E. Cantabria Dr.  
Gilbert, AZ 85296

- 1 Marshall Green  
1751 E. Orangewood Street
- 2 Gilbert, AZ 85296
- 3 Charlie Henson  
2641 E. Libra St.
- 4 Gilbert, AZ 85234
- 5 Mark Kwiat  
2075 E. Smoke Tree Road
- 6 Gilbert, AZ 85296
- 7
- 8 Elisa Warner  
625 E. Stottler Drive
- 9 Gilbert, AZ 85296
- 10 David Lundgreen  
2866 E. Cullumber Ct.
- 11 Gilbert, AZ 85234
- 12 Cathy LaTona  
1917 E. Smoke Tree Road
- 13 Gilbert, AZ 85296
- 14 Sarretta Parrault  
1887 E. Arabian Drive
- 15 Gilbert, AZ 85296
- 16 Christopher Labban, DO  
529 E. Ranch Rd.
- 17 Gilbert, AZ 85296
- 18 Jennifer Duffany  
19049 E. Cloud Rd.
- 19 Queen Creek, AZ 85242
- 20
- 21 Bruce Jones  
9107 Anne Marie Blvd.
- 22 Grand Blanc, MI 48439
- 23 Dale Borger  
2301 E. Millbrae Court
- 24 Gilbert, AZ 85234
- 25 By Michelle Gross