Santan Expansion Project CEC – Case 105 Decision No. 63611 dated May 1, 2001 L-00000B-00-0105-00000

Annual Compliance Filing dated January 31, 2012

The conditions listed below are those conditions in the CEC with ongoing requirements. All other conditions in the CEC have been satisfied.

1. Applicant shall comply with all existing applicable air and water pollution control standards and regulations, and with all existing applicable ordinances, master plans and regulations of the State of Arizona, the Town of Gilbert, the County of Maricopa, the United States, and any other governmental entities having jurisdiction.

<u>Status</u> ~ The Santan Power Plant complies with all applicable air and water pollution control standards and permits issued under applicable regulations. Those regulations, permits and standards authorize the regulatory agency with jurisdiction to issue various notices to correct and notices of violation, some of which are then referred to enforcement for the issuance of a penalty or fine. Because the issuance of a notice to correct or notice of violation (NOV) is not the final determination of the regulatory agency regarding regulatory compliance, SRP will report all NOVs that result in a fine or penalty.

SRP was assessed a penalty of \$12,400 in December 2011 for two NOVs from the Maricopa County Air Quality Department (MCAQD) for incidents that occurred in 2010. One of the NOVs was issued for a faulty diesel emergency fuel pump and a loose gasoline tank collar identified during an MCAQD inspection. The other NOV was due to an SRP self report of an exceedance of a NOx permit emission limit. SRP entered into an Order of Abatement by Consent with MCAQD in December 2011 and paid the \$12,400 penalty to resolve its liability.

3. Applicant's project has two (2) approved transmission lines emanating from its power plant's transmission switchyard and interconnecting with the existing transmission system. This plant interconnection must satisfy the single contingency criteria (N-1) without reliance on remedial action such as a generator unit tripping or load shedding.

<u>Status</u> ~ SRP does not rely on a remedial action scheme for the Santan plant interconnection and will continue to meet this obligation.

4. Applicant shall use reasonable efforts to remain a member of WSCC, or its successor, and shall file a copy of its WSCC Reliability Criteria Agreement or Reliability Management System (RMS) Generator Agreement with the Commission.

<u>Status</u> ~ SRP is a member of the WECC, the successor to the WSCC, and plans to continue its membership with the WECC.

5. Applicant shall use reasonable efforts to remain a member of the Southwest Reserve Sharing Group, or its successor.

<u>Status</u> ~ SRP is a member of the Southwest Reserve Sharing Group and plans to continue its membership.

6. Applicant shall meet all applicable requirements for groundwater set forth in the Third Management Plan for the Phoenix Active Management Area.

<u>Status</u> ~ SRP has complied with all requirements for groundwater, as set forth in the Third Management Plan for the Phoenix Active Management Area.

7. With respect to landscaping and screening measures, including the improvements listed in the IGA, Applicant agrees to develop and implement a public process consistent with the process chart (Exhibit 89) presented during the hearings, modifying the dates in the IGA with the Town of Gilbert, if necessary, to correspond with the schedule in Exhibit 89.

The new Community Working Group (CWG) will consist of 12 members, selected as follows: one member selected by the Town of Gilbert, four members selected by neighborhood homeowner associations, four representatives selected by intervenors, and three members selected by SRP (not part of the aforementioned groups) who were part of the original community working group. Applicant and landscaping consultants shall act as advisors to the CWG. CWG meetings shall be noticed to and be open to the general public. The initial meeting shall take place on an evening or weekend in the Town of Gilbert.

The objective of the CWG shall be to refine the landscaping and mitigation concept plans submitted during these hearings (Exhibit 88). The CWG shall work to achieve appropriate visual mitigation of plant facilities and to facilitate the design and installation of the concept plan components so as to maximize the positive impact on the community and to increase, wherever possible, the values of the homes in the neighboring areas. The refinement of the mitigation plans shall be reasonably consistent with the planning criteria of the Town of Gilbert, the desires of neighboring homeowner associations, and the reasonable needs of Applicant.

Applicant shall retain an independent facilitator, acceptable to the CWG, to conduct the CWG meetings. It shall be the role of the facilitator to assist in initial education and in conducting an orderly and productive process. The facilitator may, if necessary, employ dispute resolution mechanisms.

The CWG shall also assist in establishing reasonable maintenance schedules for landscaping of Applicant's plant site in public-view areas.

Applicant will develop with the Town of Gilbert a continuous fund, to be administered by the Town of Gilbert, to provide for the construction and maintenance of off-site landscaping in the areas depicted in the off-site landscaping concepts as developed by the CWG in an amount sufficient to fund the concepts in Exhibit 88 or concepts developed by the CWG, whichever is greater.

<u>Status</u> ~ <u>Onsite Landscaping Program</u> ~ SRP has completed all of the landscaping at the site.

The "Trails Area" (equestrian and bike trail) to the east of the power plant is complete. SRP transferred ownership of the Trails Area to the Town of Gilbert on September 13, 2005.

<u>Home Owners' Association (HOA) Offsite Landscaping Program</u> ~ SRP has completed the initial funding for this program, providing a onetime payment to eighteen (18) HOAs in the area for use in providing additional landscaping to help mitigate views of the power plant.

Under the program, SRP committed to making future annual payments of \$49,884 to the HOAs for offsite landscaping maintenance for a period of twenty (20) years, beginning in September 2004. In August 2011 SRP submitted a check for its eighth annual maintenance payment of \$49,884 to the Town of Gilbert for disbursement to the 18 HOAs. A copy of the cover letter sent to the Town of Gilbert is included in Appendix A.

<u>Individual County Landscaping Program</u> ~ SRP has completed this program.

10. Applicant shall operate the Project so that during normal operations the Project shall not exceed the most restrictive of applicable (i) HUD residential noise guidelines, (ii) EPA residential noise guidelines, or (iii) applicable City of Tempe standards. Additionally, construction and operation of the facility shall comply with OSHA worker safety noise standards. Applicant agrees that it will use its best efforts to avoid during nighttime hours construction activities that generate significant noise. Additionally, Applicant agrees to comply with the standards set forth in the Gilbert Construction Noise Ordinance, Ordinance No. 1245, during construction of the project. In no case shall the operational noise level be more than 3 db above background noise as of the noise study prepared for this application. The Applicant shall also, to the extent reasonably practicable, refrain from venting between the hours of 10:00 p.m. and 7:00 a.m.

<u>Status</u> ~ SRP remains in compliance with all applicable noise guidelines and standards. Throughout construction of the project, SRP took noise readings at various locations along the plant boundary three times per week to ensure compliance with noise guidelines and standards. SRP also conducted additional noise testing during nighttime construction activities, such as concrete pours.

Since Unit 5 began commercial operation on April 1, 2005, plant personnel conducted additional off-site noise testing at the sites designated by the Santan Neighborhood Committee (SNC) on the north, east and south sides of the plant boundaries. The SNC is responsible for establishing the locations, timing and frequency of the off-site noise tests. At the February 20, 2008 SNC meeting, the SNC recommended that SRP discontinue taking off-site noise readings because all of the readings so far indicated that the plant does not contribute to ambient noise in the neighborhoods where measurements were being taken. As a result of this SNC recommendation,

off-site noise testing by SRP has been discontinued. For more information on the SNC, please refer to condition 19.

14. Applicant will use only SRP surface water, CAP water or effluent water for cooling and power plant purposes. The water use for the plant will be consistent with the water plan submitted in this proceeding and acceptable to the Department of Water Resources. Applicant will work with the Town of Gilbert to attempt to use available effluent water, where reasonably feasible.

<u>Status</u> ~ Through December 2011, SRP has delivered a total of 118,068 acre feet of CAP water to GRUSP. In addition, SRP has delivered 34,279 acre feet of CAP water to the New River - Agua Fria Underground Storage Project (NAUSP). Total CAP water delivered for storage is 152,347 acre feet. CAP water is stored for future use via recovery from any SRP owned wells (Association or District) and delivered to SEP from the Eastern Canal (or onsite District wells). SRP evaluates the need for future storage on an annual basis. SRP believes that sufficient renewable water supplies have been stored to offset any future recovery of well water. SRP will continue to purchase CAP water for direct use to meet ongoing operational water demands.

15. Applicant agrees to comply with all applicable federal, state and local regulations relative to storage and transportation of chemicals used at the plant.

<u>Status</u> ~ SRP is in compliance with all applicable federal, state and local regulations relative to storage and transportation of chemicals used at the plant.

16. Applicant agrees to maintain on file with the Town of Gilbert safety and emergency plans relative to emergency conditions that may arise at the plant site. On at least an annual basis Applicant shall review and update, if necessary, the emergency plans. Copies of these plans will be made available to the public and on Applicant's web site. Additionally Applicant will cooperate with the Town of Gilbert to develop an emergency notification plan and to provide information to community residents relative to potential emergency situations arising from the plant or related facilities. Applicant agrees to work with the Gilbert police and fire departments to jointly develop on site and off-site evacuation plans, as may be reasonably appropriate. This cooperative work and plan shall be completed prior to operation of the plant expansion.

<u>Status</u> ~ SRP is in compliance with all safety standards including secondary containment for bulk materials (chemicals) and development of evacuation procedures for plant personnel. The plant's Emergency Response/Contingency Plan is available on the SRP website. Additionally, a detailed copy of the Emergency Response plan is available at the Town of Gilbert Fire Department as well as with the State Emergency Response Commission (SERC) and the Maricopa County Local Emergency Planning Committee (LEPC).

18. In order to reduce the possibility of generation shortages and the attendant price volatility that California is now experiencing, SRP will operate the facilities consistent with its obligation to serve its retail load and to maintain a reliable transmission system

within Arizona.

<u>Status</u> ~ SRP's first priority in operating its generating stations, transmission system and distribution system is to safely supply a reliable, low cost source of power to its retail customers. The Santan Expansion Project will be operated in the same manner as current resources and is a significant element in SRP's plans to avoid the kind of price volatility that accompanied the California crisis.

19. Beginning upon operation of the new units, Applicant will establish a citizens' committee, elected by the CWG, to monitor air and noise compliance and water quality reporting. Applicant will establish on-site air and noise monitoring facilities to facilitate the process. Additionally Applicant shall work with Maricopa County and the Arizona Department of Environmental Quality to enhance monitoring in the vicinity of the plant site in a manner acceptable to Maricopa County and the Arizona Department of Environmental Quality. Results of air monitoring will be made reasonably available to the public and to the citizens' committee. Applicant shall provide on and off-site noise monitoring services (at least on a quarterly basis), testing those locations suggested by the citizens' committee. The off-site air monitoring plan shall be funded by the Applicant and be implemented before operation of the plant expansion.

<u>Status</u> ~ The Santan Neighborhood Committee (SNC) met on April 27, 2011, June 8, 2011 and November 2, 2011. Santan personnel provided data on emissions and water discharges. At the June 8, 2011 special meeting, SRP personnel provided a summary of Sargent & Lundy's final report for condition 38, recommending no emission control changes at this time. The SNC presented a letter to the ACC in support of this recommendation. At the November 2, 2011 meeting, SRP personnel reported on the ACC's decision regarding condition 38 that found no improvements to Santan are required at this time. The next meeting of the Santan Neighborhood Committee is scheduled for April 18, 2012.

As noted in the October 2008 Quarterly Report, the SNC recommended at their May 14, 2008 meeting that SRP discontinue recording data from the Gilbert Air Quality Station because the committee believed sufficient data has been collected. The committee further recommended that the station be removed by SRP. On December 9, 2008, SRP received a letter from the Director of the Maricopa County Air Quality Department (MCAQD), noting the department's agreement with the findings of the Air Quality Monitoring Program Report and determining that the Gilbert Air Quality Station has served its purpose and is no longer needed, allowing for the removal/demobilization of the station. SRP removed the station and donated it to ADEQ.

20. Applicant will explore, and deploy where reasonably practicable, the use of available technologies to reduce the size of the steam plumes from the unit cooling towers. This will be a continuing obligation throughout the life of the plant.

<u>Status</u> ~ SRP completed a joint research project with ASU in June of 2009 to determine the feasibility of recovering water from cooling tower plumes, which would decrease their visibility. At this time, however, there is no

commercially demonstrated or available technology for full scale application.

In 2011 SRP completed an updated assessment of commercially available plume abatement technologies and costs for abating cooling tower plumes. To date, there are limited feasible designs that have been developed to mitigate the visibility of cooling tower plumes and there have been no significant improvements in these technologies or reductions in cost associated with them for decades. Of the three technologies available, the Parallel Path Wet Dry (PPWD) technology is the only one with a reasonable potential for applicability to Santan, so SRP evaluated it in some detail. SRP found the technology not feasible due to its large upfront capital expense, increased auxiliary load and maintenance requirements, as well as its detrimental effect on plant output.

In its research, SRP found that only a very small number of utilities have cooling towers equipped with plume abatement technology. SPX Cooling Technologies, an industry leader in cooling tower technology, only has approximately 80 cooling tower retrofits worldwide. GEA has not retrofitted plume reduction equipment to any existing towers in the USA, but their German sister company did one such project in the UK in the 1990's. Limited applications of plume abatement technology are primarily a result of:

- High initial capital cost
- Decreased thermal performance
- Increased auxiliary power
- Increased maintenance

Because of the negative impacts of plume abatement technology, it is generally only applied in circumstances where reduced visibility or icing conditions resulting from cooling tower operation create safety hazards for the public. The location of the cooling towers at Santan does not present a visibility or safety issue. At this time cooling tower abatement is not an industry standard and does not appear that it will be cost effective for some time.

SRP will continue to monitor and evaluate any technological advances in the cooling tower industry. As part of SRP's continuing obligation to explore cooling tower plume abatement technology throughout the life of the plant, SRP intends to re-evaluate Condition 20 every five years to coincide with the five year emissions improvements review required in condition 38.

22. Other than the Santan/RS 18 lines currently under construction, Applicant shall not construct additional Extra High Voltage transmission lines (115kV and above) into or out of the Santan site, including the substation on the site.

<u>Status</u> ~ SRP will not construct additional Extra High Voltage transmission lines (no new circuits 115kV and above) into or out of the Santan site or

substation on the site. However, some of the existing circuits may be bundled in the future.

24. Applicant shall work in a cooperative effort with the Office of Environmental Health of the Arizona Department of Health Services to enhance its environmental efforts.

<u>Status</u> ~ A representative of the Arizona Department of Health Services serves on the Santan Neighborhood Committee. The representative's role is to provide technical assistance and expertise to the citizens committee mentioned in condition 19. Such assistance will cover air, noise, and water quality issues.

25. Applicant shall operate, improve and maintain the plant consistent with applicable environmental regulations and requirements of the Environmental Protection Agency, the Arizona Department of Environmental Quality, Maricopa County and the Town of Gilbert.

<u>Status</u> ~ SRP has an environmental management system (EMS) designed to assure compliance with applicable laws and regulations. The Santan Generating Station is integrated in the SRP EMS. Procedures and Environmental Information Management Systems (EIMS) have been modified to incorporate the new requirements associated with the Santan Expansion Project. Plant personnel responsible for meeting environmental compliance have received training on the new requirements. SRP continues to implement its EMS to ensure continued compliance with all applicable environmental regulations and requirements.

For additional information on SRP's efforts to comply with federal, state, county and city environmental regulations, please refer to condition 1.

27. Applicant shall install continuous emission monitoring equipment on the new units and will make available on its website emissions data from both the existing and new units according to EPA standards. Applicant shall provide information to the public on its website in order to assist the public in interpreting the data, and provide viable information in a reasonable time frame.

<u>Status</u> ~ SRP has installed continuous emission monitoring equipment on the new units. Information on the continuous emission monitoring equipment and the emissions data is available on the SRP website for the SEP.

33. Applicant shall not transfer this Certificate to any other entity for a period of 20 years from the date of approval by the Corporation Commission, other than as part of a financing transaction where operational responsibilities will remain with Applicant, and where Applicant will continue to operate the plant in accordance with this Certificate.

<u>Status</u> ~ SRP has no plans to transfer this Certificate to another entity.

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

<u>Status</u> ~ Since the issuance of the ACC order for the SEP Certificate of Environmental Compatibility, SRP has not burned diesel fuel in the existing Santan generating units. The new generating units associated with the SEP do not have diesel fuel-burning capability.

On March 3, 2004, the Maricopa County Environmental Services Department, now the Maricopa County Air Quality Department (MCAQD), issued a revision to SRP's air quality permit to allow for the use of ultra low sulfur fuel as an emergency fuel in the existing units. The conditions in the air quality permit are identical to the requirements for emergency fuels contained in Maricopa County's new air quality rule for existing power plants (Rule 322), with the exception of the requirement that SRP use ultra low sulfur fuel rather than low sulfur fuel. In addition, the revised air permit includes a separate condition stating that SRP cannot use the fuel unless previously authorized by the ACC. SRP will continue to fully comply with Condition 36 of the CEC that prohibits the use of diesel fuel in any Santan unit unless amended by the ACC on an emergency basis at some future time.

38. Beginning upon commercial operation of the new units, Applicant shall conduct a review of the Santan Generating facility operations and equipment every five years and shall, within 120 days of completing such review, file with the Commission and all parties in this docket, a report listing all improvements which would reduce plant emissions and the costs associated with each potential improvement. Commission Staff shall review the report and issue its findings on the report, which will include an economic feasibility study, to the Commission within 60 days of receipt. Applicant shall install said improvements within 24 months of filing the review with the Commission, absent an order from the Commission directing otherwise.

<u>Status</u> ~ SRP filed its first report with the Commission on July 1, 2011 that included an assessment of technology that could reduce plant emissions and recommendations for modifying the procedure for future five-year reviews. SRP recommended that no additional improvements be installed on the older units as none of the available emissions controls are economically justified and the costs far outweigh the benefits. Improvements to the new units are also not appropriate as the units are still considered state-of-the-art technology.

The ACC issued Decision No. 72636 on October 14, 2011, adopting SRP's recommendations and ordering SRP to not install any improvements at the Santan Plant at this time. The Commission also ordered SRP in future reviews to incorporate the monetized value of all externalities that would be eliminated due to new emissions controls that are being evaluated as part of the cost-benefit analysis. The ACC agreed to adopt procedural changes to provide for more clarity for future reviews. Those changes were incorporated into the Condition 38 language. Condition 38 now reads:

Beginning upon commercial operation of the new units. Applicant shall conduct a review of the Santan Generating facility operations and equipment every five years and shall, within 120 days of completing such review, file with the Commission and all parties in this docket, a report listing all improvements which would reduce plant emissions and the costs associated with each potential improvement. Commission Staff shall review the report and issue its findings on the report, which will include an economic feasibility study, to the Commission within 90 days of receipt. Applicant shall install said improvements within 48 months after an order issued by the Commission identifying the specific air emission controls and directing their installation. In the event that new controls or a new operating methodology are required, the in-service date of any new control technology or operating methodology will be the starting date for the next five-vear review period. If no new operating methodology is required, the starting date for the next five-year review period shall be the effective date of the Commission's decision regarding the previous five-year review report.

SRP will file its next report by October 14, 2016 to comply with the Commission's decision.

39. Applicant shall provide \$20,000 to the Pipeline Safety Revolving Fund on an annual basis, thus improving the overall safety of pipelines throughout the State of Arizona.

<u>Status</u> ~ In March 2011, a check for \$20,000 was sent to the Arizona Corporation Commission, for deposit in the Pipeline Safety Revolving Fund. This check satisfies compliance with this condition for the year ending April 30, 2011. A copy of the transmittal letter is included as Appendix B and was previously filed with Docket Control on April 6, 2011. Subsequent checks will be distributed in the March/April timeframe each year.