

## US EPA Fact Sheet

# Federal Implementation Plan Best Available Retrofit Technology for Four Corners Power Plant, Navajo Nation

August 6, 2012

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### Summary of Action

- EPA is requiring Four Corners Power Plant (FCPP), located on the Navajo Nation, to reduce emissions of oxides of nitrogen (NO<sub>x</sub>). EPA is also setting emission limits for particulate matter (PM) based on emission rates already achieved at FCPP. These pollutants contribute to visibility impairment in 16 national parks and wilderness areas surrounding FCPP. See map.

#### To reduce NO<sub>x</sub> emissions:

EPA is allowing FCPP to either (1) meet a plant-wide emission limit of 0.11 lb/MMBtu on a rolling 30-day average calculated on a heat-input weighted basis, which represents an 80 percent reduction from current NO<sub>x</sub> emission rates, or (2) implement an alternative emission control strategy put forth by the owners of FCPP to retire Units 1 – 3 and install controls on Units 4 and 5 by July 31, 2018 to each meet an emission limit of 0.098 lb/MMBtu, on a rolling average basis of 30 boiler operating days, which represents an 87 percent reduction from current NO<sub>x</sub> emission rates.

#### To reduce PM emissions:

EPA is determining that it is not necessary or appropriate to require FCPP to install new air pollution controls for PM on Units 1 – 3, and is setting an emission limit of 0.015 lb/MMBtu on Units 4 and 5 that is achievable through proper operation of the existing baghouses. EPA is retaining the existing 20 percent opacity limit on all units.

EPA is also requiring FCPP to comply with a 20 percent opacity limit on its material handling storage facilities. This action is unrelated to EPA's BART determination, but addresses an outstanding issue from the 2007 FIP for FCPP.

### Background

- FCPP is located on the Navajo Nation Indian Reservation near Farmington, New Mexico and is the largest source of NO<sub>x</sub> in the country.
- In October 2010 EPA proposed NO<sub>x</sub> and PM limits as Best Available Retrofit Technology (BART) for FCPP. This proposal would reduce visibility impairment from FCPP an average of 57 percent at 16 national parks and wilderness areas. See map on page 3.

- Following EPA's October 2010 proposal, Arizona Public Service put forward an alternative: to retire units 1, 2, and 3, the three older and dirtier units and install selective catalytic reduction (SCR) technology to reduce emissions of NO<sub>x</sub> on units 4 and 5.
- In February 2011, EPA proposed to find that the alternative emissions control strategy would achieve more visibility progress than EPA's initial proposal. The alternative would reduce visibility impairment from FCPP an average of 72 percent at 16 national parks and wilderness areas.
- Visibility is important to tourism and the economic vitality of the states, local and tribal communities in the Four Corners region. Every year over 280 million people visit our nation's most treasured parks and wilderness areas.
- Yet, many visitors cannot fully appreciate the spectacular vistas because of the veil of white or brown haze that hangs in the air, reducing visibility and dulling the natural beauty.
- The pollutants that contribute to haze are the same pollutants that affect public health, damage forests and crops, and contaminate lakes and streams.
- FCPP is the largest source of nitrogen oxides in the country. Nitrogen oxides not only impair visibility by increasing haze, but also affect public health. Our action gives FCPP two compliance options to improve air quality and visibility, a major attraction to the public of these scenic national parks and wilderness areas, and an important source of tourist dollars for the economy of the Four Corners region.
- Our technical analysis shows that SCR will reduce NO<sub>x</sub> emissions cost-effectively at \$2,500 – \$3,200 per ton of NO<sub>x</sub> reduced. These costs are consistent with costs associated with other BART determinations.

For More Information: <http://www.epa.gov/region9/air/navajo/index.html>

