

## US EPA FACT SHEET

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### **Proposed Federal Implementation Plan Best Available Retrofit Technology for Navajo Generating Station, Navajo Nation**

**January 17, 2013**

#### **Summary of Action**

- EPA is proposing to reduce harmful nitrogen oxide (NO<sub>x</sub>) emissions from the Navajo Generating Station (NGS), one of the largest sources of NO<sub>x</sub> emissions in the country. These pollutants contribute to visibility impairment in 11 national parks and wilderness areas surrounding NGS, including the Grand Canyon which is less than 20 miles away from the plant. See map.
- After careful consideration of feedback on the 2009 Advanced Notice of Public Rulemaking from numerous stakeholders, EPA recognizes that the circumstances related to NGS create unusual and significant challenges for a 5-year compliance date. Consequently, EPA is proposing EPA is proposing Best Available Retrofit Technology (BART) and an Alternative to BART that includes a flexible timeline for reducing NO<sub>x</sub> emissions:
  - Best Available Retrofit Technology:
    - EPA is proposing that BART is a plant-wide emission limit for NO<sub>x</sub> of 0.055 lb/MMBtu (Million Metric British Thermal Units) by 2018. This can be achieved with Selective Catalytic Reduction (SCR) in combination with the existing LNB/SOFA (low-NO<sub>x</sub> burners) the owners of NGS voluntarily installed between 2009 and 2011.
  - Alternative to BART:
    - The proposed “Alternative to BART” provides the owners of NGS additional time, until 2023, to install new controls to achieve the same emission limit as BART. This option gives credit to the owners of NGS for the emission reductions that have resulted from voluntarily installing low-NO<sub>x</sub> burners in 2009 - 2011. Had the owners waited for EPA’s BART determination, the reductions would not have started until 2018.
    - This alternative also recognizes the importance of NGS to numerous Indian tribes located in Arizona and the federal government’s reliance on NGS to meet the requirements of water settlements with several Indian tribes.
  - Additional Alternatives:

- EPA has also evaluated, and is requesting comments, on two other alternatives that require additional emission reductions over longer timeframes in this notice. EPA may consider a longer timeframe for installing SCR if the owners of NGS achieve sufficient additional NO<sub>x</sub> reductions.
- Emissions Reductions:
  - SCR, in combination with the low-NO<sub>x</sub> burners, provides the greatest control of NO<sub>x</sub> emissions. The combination of these technologies will reduce emissions by over 84% or a total of 28,500 tons per year.
- Visibility Improvements:
  - These emission reductions will result in cumulative visibility benefits of 35 deciviews and perceptible visibility improvement (greater than 1 deciview) at all eleven Class I areas impacted by NGS. Visibility will improve at Grand Canyon National Park by 5.4 deciviews.
- Cost:
  - EPA's analysis shows that SCR will reduce NO<sub>x</sub> emissions cost-effectively at \$2,240/ton. These costs are comparable to, or lower than, the costs associated with other BART determinations. Electricity rates are expected to increase by less than 1% for customers of the Salt River Project.
- Timeframe:
  - EPA is allowing additional time for this source because it is on tribal land and not subject to the same legal deadlines as sources on state land. Under the Tribal Authority Rule (TAR), EPA has the discretion to determine if and when a FIP is necessary and appropriate including the timeline for complying with those requirements.
- Credit for Prior Reductions:
  - EPA is giving NGS credit for early installation of the low-NO<sub>x</sub> burners. EPA has calculated this credit to be 92,175 tons, which is a key component of the proposed Alternative to BART.

## **Background**

- NGS is located on the Navajo Nation Indian Reservation near Page, Arizona and is one of the largest sources of NO<sub>x</sub> in the country. Navajo Generating Station (NGS) is a 2,250 MW coal-fired power plant.
- NO<sub>x</sub> not only impairs visibility by increasing haze, but also affects public health. EPA's proposed action gives NGS several alternative options that will all substantially improve air quality and visibility.

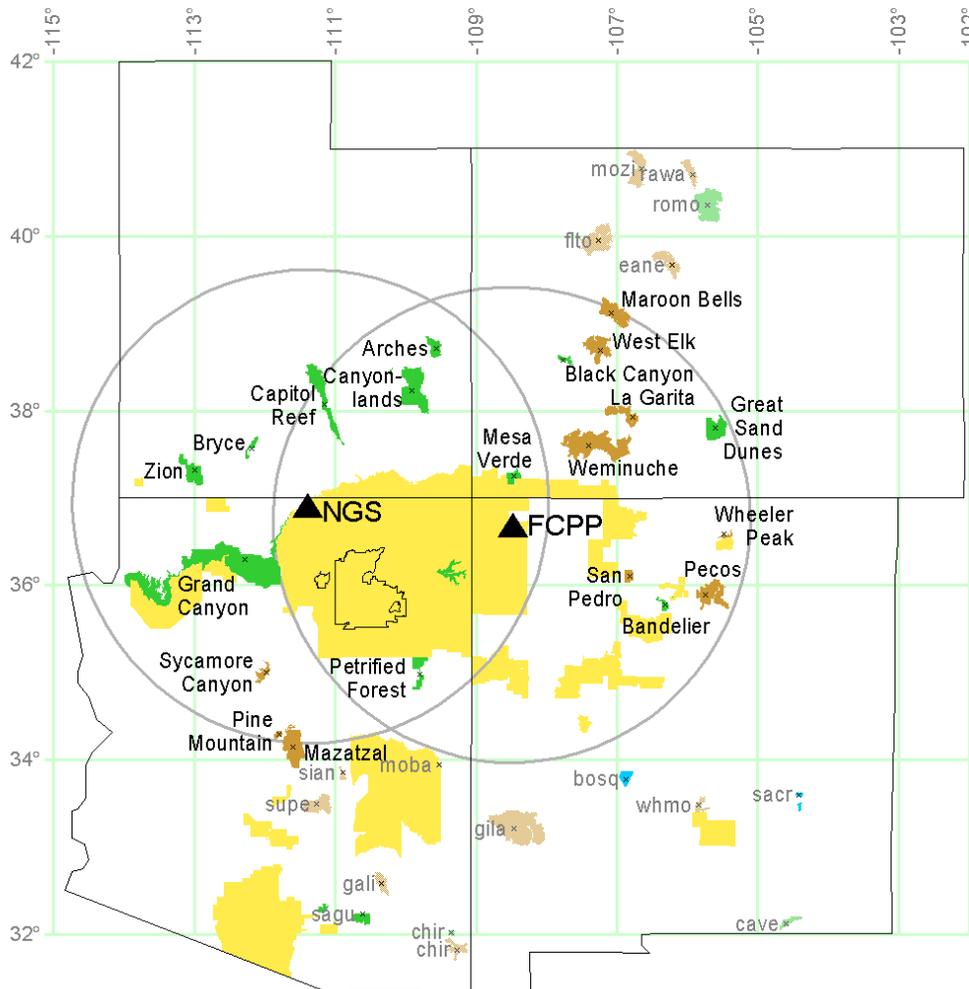
- Congress requires, in the Clean Air Act, that EPA improve visibility in 156 federal national parks and wilderness areas across the country. States are required to adopt Regional Haze plans that improve visibility over time. These plans include BART determinations, where older sources are evaluated for additional pollution controls. Most states have completed this process and many have required additional BART controls on sources under their jurisdiction.
- NGS has already installed pollution control equipment to significantly reduce emissions of sulfur dioxide (SO<sub>2</sub>) and particulate matter in order to protect visibility and improve air quality. Now EPA is proposing that the facility take comparable action to reduce NO<sub>x</sub> emissions, the last component of pollution that significantly affects regional haze.
- In 2009, EPA published an Advanced Notice of Proposed Rulemaking. EPA received over 6,700 comments and held numerous public and private discussions with stakeholders about the complex issues surrounding NGS.
- In 2011 alone, 4 million people visited the Grand Canyon. Over 20 million tourists visit the national parks in Arizona and Utah annually. Visibility is important to healthy tourism and the economic vitality of the states, local and tribal communities in the West.
- NGS is co-owned by the U.S. Bureau of Reclamation (24.3%), Salt River Project (21.7%), Los Angeles DWP (21.2%), Arizona Public Service (14%), Nevada Power (11.3%) and Tucson Electric Power (7.5%).
- EPA encourages a robust public discussion of these and other possible approaches. EPA is prepared to issue a supplemental proposal if approaches other than the proposed BART determination or proposed alternative are identified as satisfying the requirements of the Clean Air Act and meeting the needs of the stakeholders.

### **Next Steps**

- EPA is providing a 90-day comment period and will hold several hearings near the facility in Spring of 2013.

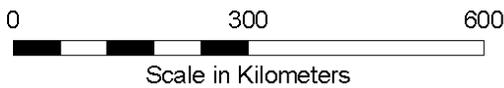
For More Information: [www.epa.gov/region9/mediacenter/ngs/](http://www.epa.gov/region9/mediacenter/ngs/)

# Class I Areas near FCPP and NGS modeled for Regional Haze Rule BART



*Legend*

- National Park Service
- US Forest Service
- Indian Reservation
- Class I Area centroid
- Modeled Power Plant



Four Corners Power Plant:  
 16 Class I Areas within 300 km

Navajo Generating Station:  
 11 Class I Areas within 300 km