

North Dakota Regional Haze Program Discussion
Presented to the North Dakota Energy Development and Transmission
Committee
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Seeing Clearly

The hazy relationship
between EPA and ND

Clean Air Act Section 169A 1977



Visibility Protection Federal Class I Areas



Purpose of Regional Haze Program

**The prevention of any future,
and the remedying of any existing,
impairment of visibility
in mandatory Class I areas
which impairment results from manmade air pollution**

No visibility impairments by 2064



Regional Haze Program

- This is a VISIBILITY program, not a HEALTH PROTECTION program
- Health is protected by the National Ambient Air Quality Standards
- North Dakota meets all the National Ambient Air Quality Standards
- **THIS PROGRAM IS ONLY ABOUT VISIBILITY IN NATIONAL PARKS AND WILDERNESS AREAS**



What Has Happened:

- **1999** Federal Regional Haze regulations adopted
- **2007** States required to submit plans (SIPs)
- **2011** New EPA deadline after most states miss first deadline
- **2010** North Dakota submits SIP with best available retrofit technology (BART): *NO_x ↓43 percent and SO_2 ↓86 percent*
- EPA fails to approve
- **2011** Environmental group sues EPA to enforce their regulations



Regional Haze Program

- Requires states to draft compliance plans (SIP) including
 - Identification of *reasonable progress goals*
 - Installation of “*best available retrofit technology*” on plants built between 1962 and 1977 that impact Class 1 areas
- EPA must approve the state compliance plan BUT
 - State plan should be given deference over EPA’s preference
- IF EPA disapproves, they issue a federal implementation plan (FIP) and take over the state program in that area



September 1, 2011 - EPA proposes federal plan

- NO_x controls on Leland Olds (Basin) and Young (Minnkota)
 - Very stringent limits using different technology than the State selected: NO_x ↓90 percent
- Antelope Valley Station (Basin) and Coal Creek Station (Great River)- FIP under reasonable progress – less stringent, less costly technology
- Accepted reasonable progress controls for the Coyote and Heskett Stations

More costs....

- North Dakota Industry: **Expended \$700 + million** on emission controls to date
- EPAs selected technology –selective catalytic reactors- will cost:
 - Minnkota **\$500+ million** to install vs \$40 million for the State's technology
 - Basin **\$200+ million** to install





EPA's logic:

- All coal is the same, so SCRs will work on lignite
- EPA technology- SCR- reduces more NO_x than State technology
- EPA technology will work because other plants with similar boilers use SCRs

...BUT...



North Dakota says:

- All coal is not the same ... ND lignite is different
- EPA technology is not proven to work...
 - ...on cyclone boilers
 - ...that burn North Dakota lignite coal
 - ...without extraordinary reengineering
- Vendors will not guarantee EPA technology



North Dakota says:

- Use selective non-catalytic reduction (SNCR)
- Shown to work on plants burning ND lignite
- Even with all North Dakota plants closed ...
North Dakota can not meet long-term visibility
goals



Summary

- Regional Haze / Best Available Retrofit Technology (BART)
 - Visibility issue, not health issue
 - Address visibility around *Theodore Roosevelt National Park and Lostwood National Wildlife refuge*
 - No health issue because North Dakota already meets current health-based emission standards
 - Main disagreement – what technology to install
 - Costs = \$700 million or more



Summary

- EPA seeks to override state knowledge and authority to determine the best technology to control NO_x emissions from North Dakota lignite powered plants



Current status

- EPA expected to issue final decision by January 26, 2012
- State of North Dakota must determine whether to sue EPA if decision is adverse