Mirant Mid-Atlantic

MWAQC Technical Advisory Committee Briefing

January 21, 2005

Discussion Topics

- NOx Settlement
- Progress Report on Current Projects
- View on Multipollutant Legislation

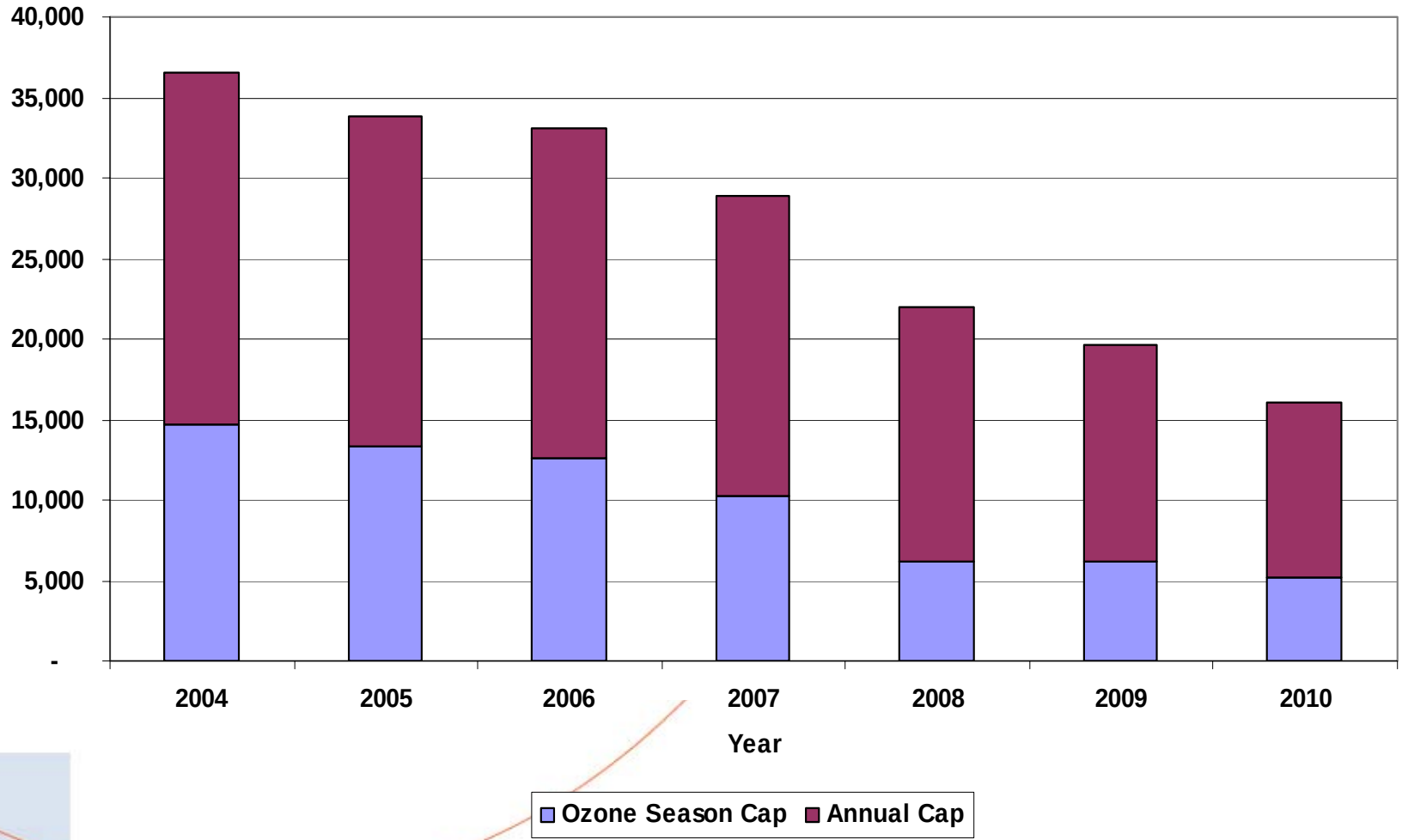
NOx Settlement

Key Elements
of Mid-Atlantic Global NOx Settlement

- Control Technology to be Installed
  - Potomac River 3,4,5 – Low NOx Burners in 2004, SOFA in 2005
  - Morgantown 1,2 – SCRs in 2007, 2008
- Declining NOx Tonnage Caps from 2004 through 2010
  - Ozone Season Caps – for Potomac River and System
  - Annual Caps – for System
- Emissions Rate Limits
  - Ozone Season System limit of 0.150 lb/MBtu starting in 2008
  - Morgantown SCRs limit of 0.100 year-round, once installed
- Penalty and Projects
  - Cash payment of $500,000
  - Supplemental Projects totaling $1.0 M to reduce dust and particulate matter emissions at the site

Terms of Settlement

NOx Caps & Trading Provisions

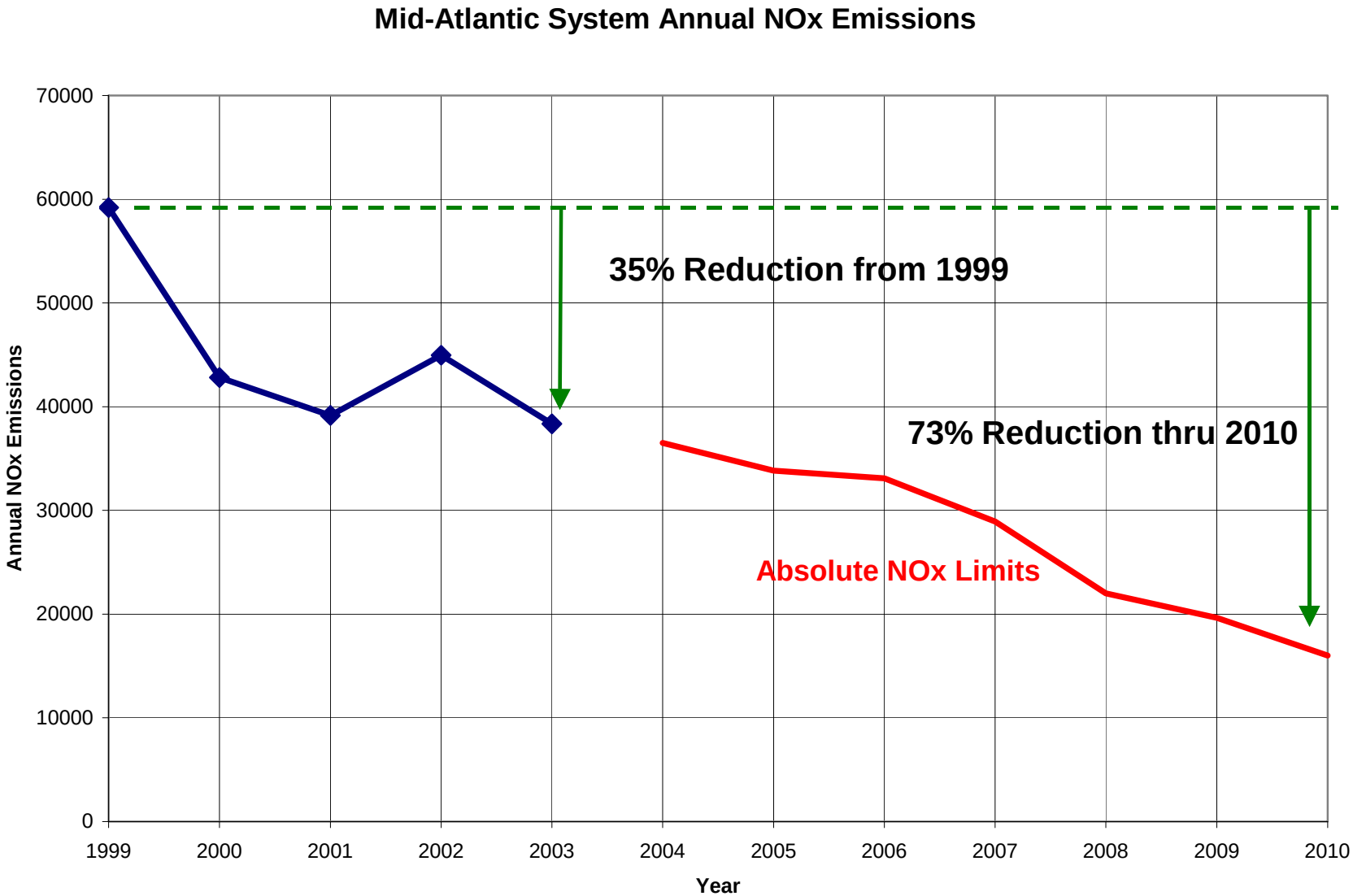


Environmental Projects

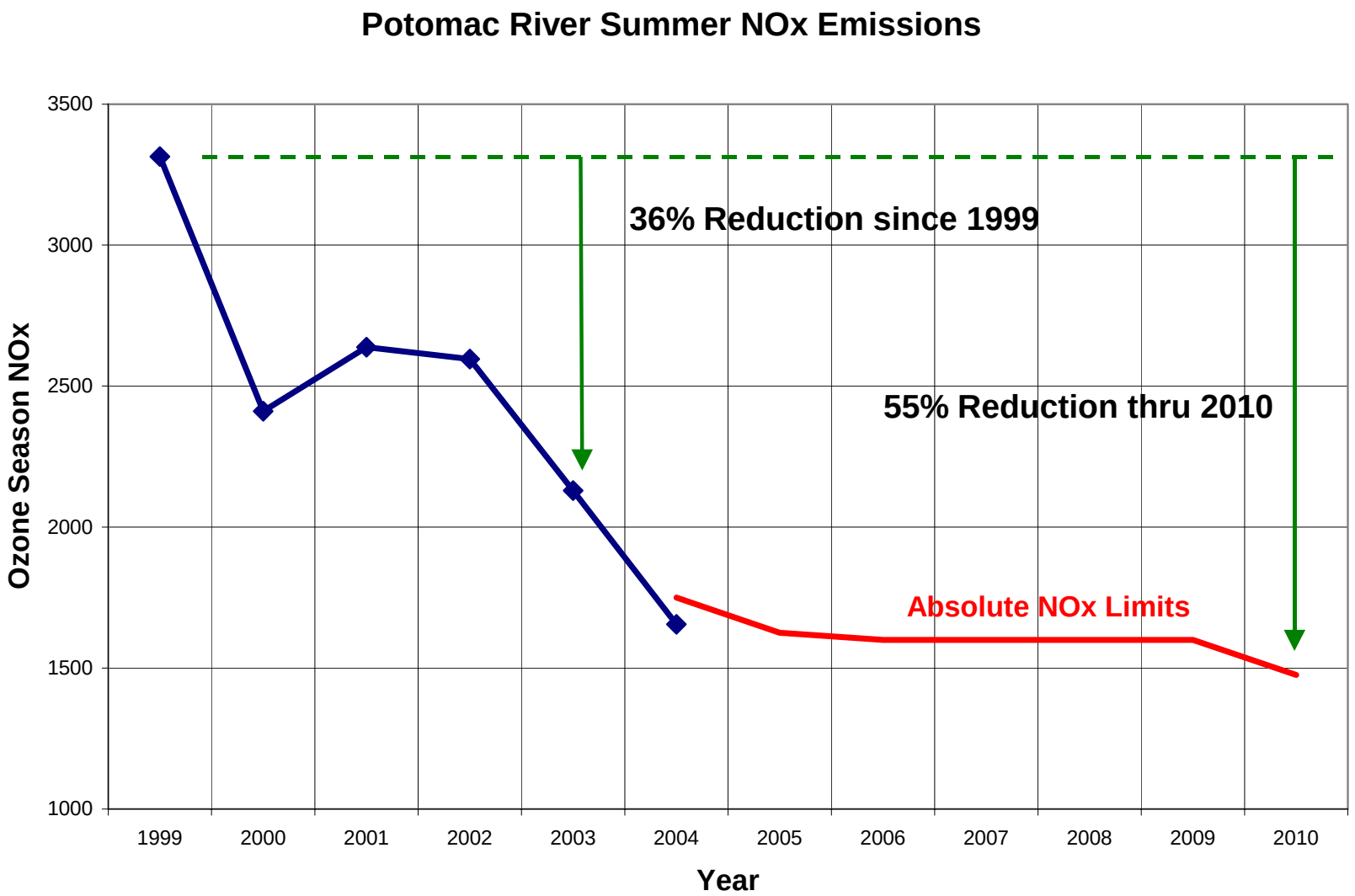
PROJECT	Est. PM Reduction
• Ash Silo Vent Secondary Filters	30 tons
• Truck Wash Facility	13.7 tons
• Coal Pile Fencing	2.8 tons
• Coal Pile Binding Agent	800 lbs
• Ash Unloader Replacement	200 lbs
• Truck Loading Dust Suppression	200 lbs
• Railcar Unloading Dust Suppression	200 lbs
• Settled Dust Study	
• Contribution to Clean Air Partners	

TOTAL Cost = $1,000,000

Annual System NOx Reductions



Summer NOx Reductions



Benefits of Settlement

- Resolves Potomac River NOV
- Achieves 0.15 lb/MBtu system NOx average by 2008
- Year-round SCR operation will reduce PM2.5 emissions
- Emission caps ensure environmental benefit while allowing flexibility over methods to reach compliance targets
- When paired with future SO2 controls, significant Hg and additional PM2.5 reductions

Progress on NOx Projects

Current NOx Projects

- Chalk Point Unit #2 SACR
- Morgantown #1 SCR
- Potomac River #3-5 SOFA

Chalk Point #2 SACR

- SACR = Selective Auto-Catalytic Reduction
- Injects ammonia + natural gas in convection pass of boiler
- Gas acts as catalyst for NOx reduction and consumes excess ammonia
- Expecting ~50% reduction in NOx
- In final engineering / procurement phase
- Reagent switch from anhydrous ammonia to urea
- System in service late 2005 / early 2006

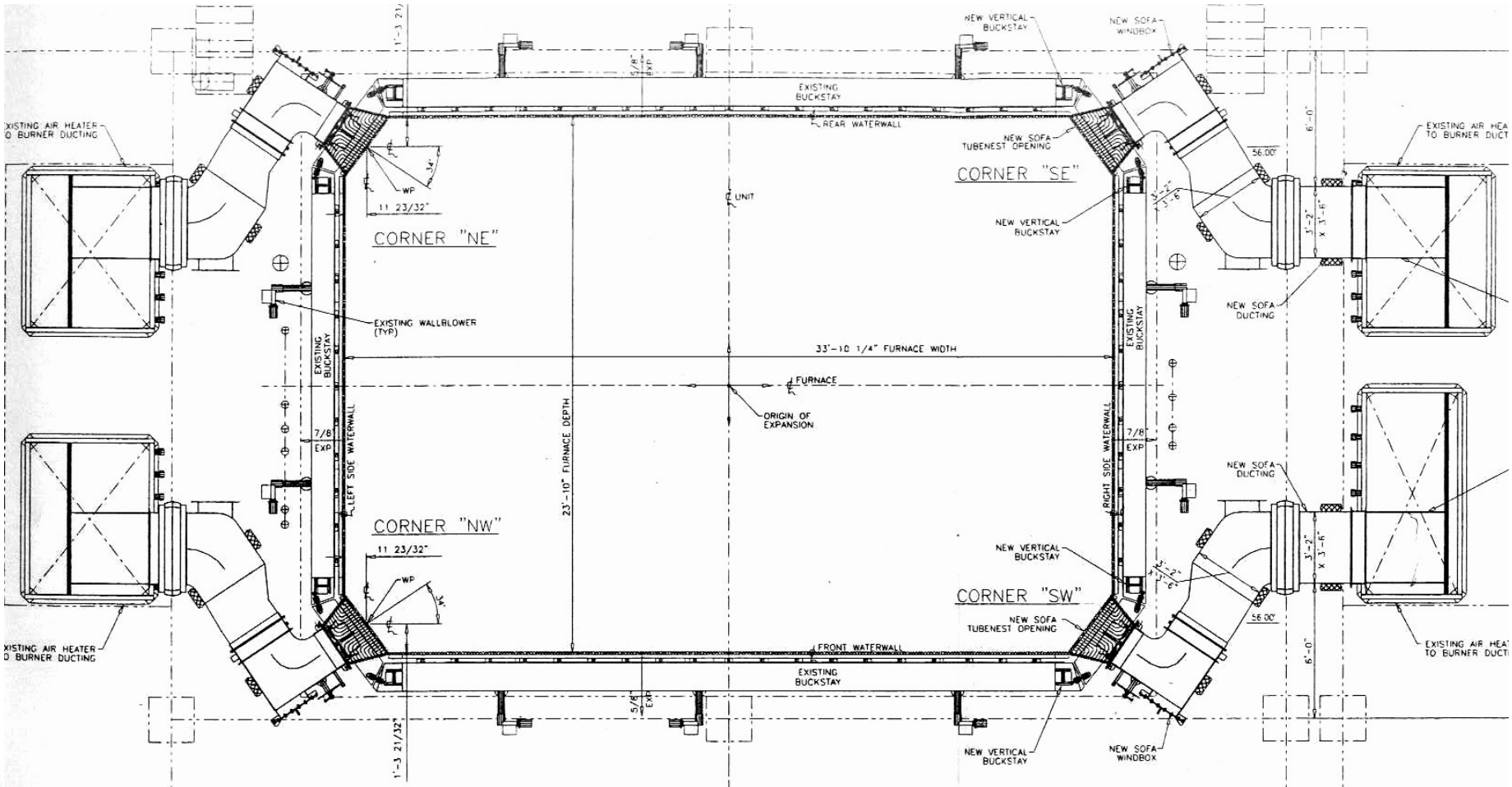
Morgantown #1 SCR

- First SCR went out for bids in October 2004
- Bid evaluation process underway
- Currently on schedule for May 2007 in-service date
- Urea selected as reagent

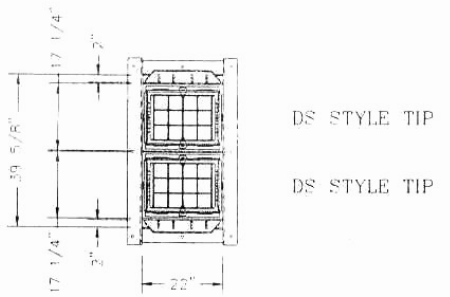
Potomac River #3-5 SOFA

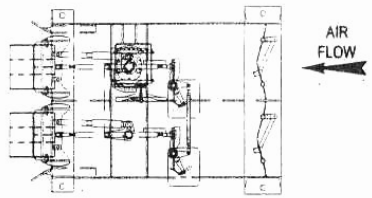
- Dampers, drives, ductwork being procured / fabricated
- All three units to be retrofitted this spring
- Low NOx burners installed on Units 3-5 last spring - 15% reduction
- Low NOx burners installed on Unit 1-2 last fall - 5-10% reduction

Potomac River SOFA



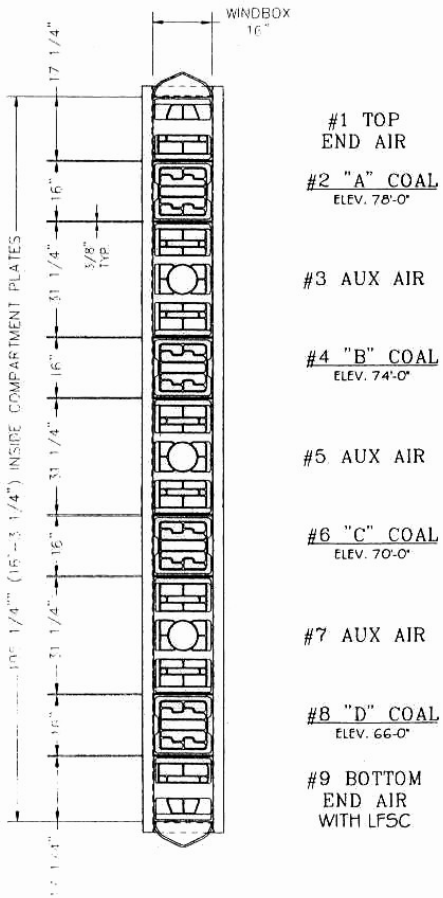
SOFA Port

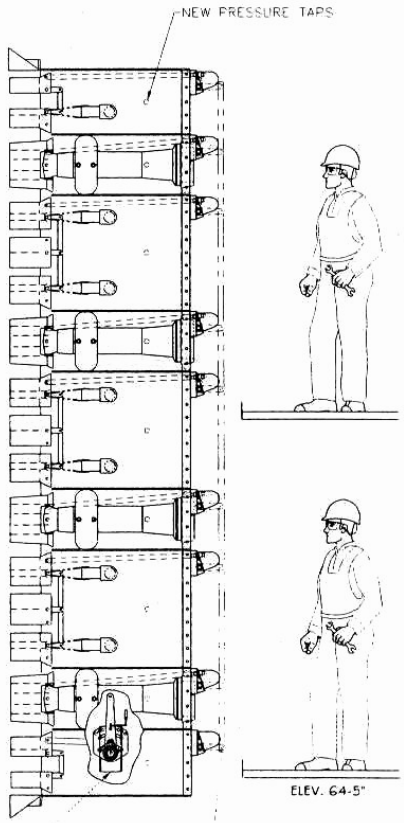




(2) SOFA WINDBOXES WITH HORIZONTAL DIRECTIONAL CONTROL CORNERS "SW" AND "NE"

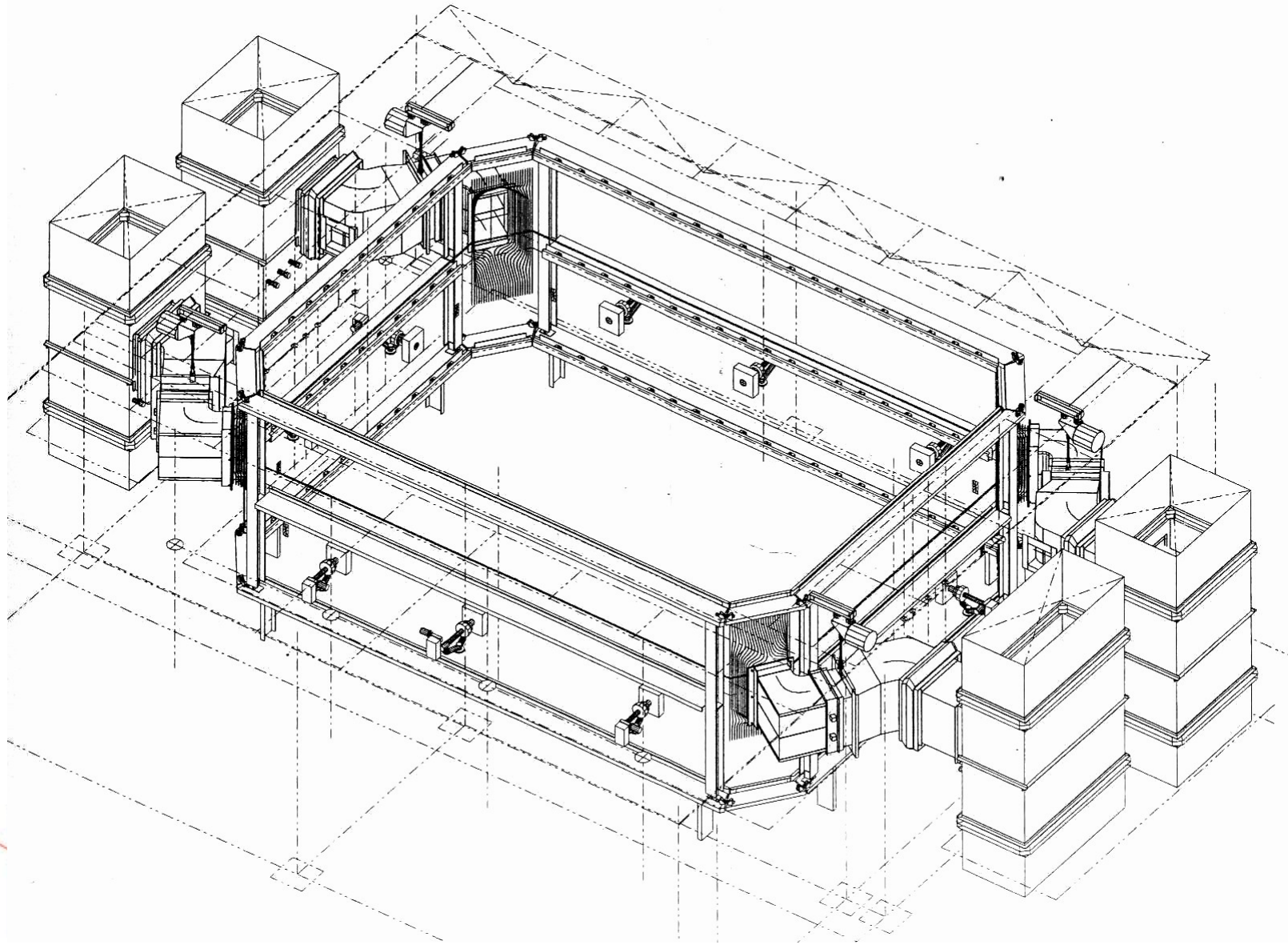
Burner Corner





NEW LFSC MANUAL TILT DRIVE MECHANISM FOR BOTTOM END AIR COMPARTMENT

SOFA Ductwork



Multipollutant Legislation

Multipollutant Legislation

- Cap & Trade approach vs. Percent Reduction
- Realistic Timeline to Implement
  - Technical: Time to engineer, procure, and install
  - Financial: Cost of NOx, SO2, & Hg controls simultaneously
  - Alignment with Federal programs
- Mercury
  - Substantial Co-benefits from NOx & SO2 controls
  - No large scale / long term demonstrations yet
  - Continuous Hg monitors not commercially available
- CO2
  - Few options for significant reduction on coal-fired units
  - Fuel switch / repowering to gas costly to customer and generator

Questions