

HEDD Unit Control Strategy Options, Issues and Questions

**Presentation to
OTC HEDD Workgroup
January 31, 2007**

**Joseph A. Miakisz
M.J. Bradley & Associates**



Possible HEDD Unit Emission Control Strategies

- **Retrofit emission control equipment (e.g., water injection on CTs, SNCR on coal units, etc.)**
- **Fuel switch on dual-fuel units (oil to natural gas)**
- **“Re-dispatch” from higher emitting HEDD units to lower emitting HEDD units**
- **Shutdown/mothball marginally economical units**
- **Reduction in NOx RACT averaging plans (intra-company, inter-company?, inter-state?)**
- **Over-control of non-HEDD units**

HEDD Unit Control Strategy Issues/Questions

- ***Definition of high electric demand day***
 - Peak load threshold?
 - OTR-wide or sub-regional (e.g., each ISO)?
- ***Definition of HEDD unit***
 - % total operating time during ozone season threshold?
 - Controlled vs, non-controlled units?
 - All units in OTR or only those located within some defined urban corridor?

HEDD Unit Control Strategy Issues/Questions (Cont'd.)

- ***Cost/reliability and air quality benefits analyses***
- ***What about companies not participating in Workgroup?***
- ***Different states in OTR have different degrees of attainment deficiencies***
 - **Does this suggest state-by-state approach to address HEDD units as opposed to regional approach?**
 - **CT and DE have already proposed regulations governing HEDD units**

HEDD Unit Control Strategy Issues/Questions (Cont'd.)

- ***Short-term NOx reduction target from HEDD units***
 - **How will the reduction target be expressed?**
 - Emission rate?
 - Specified tonnage reduction (per unit? Per company?)?
 - **What will trigger emission reduction requirement on a HEDD and how will this be implemented?**
 - Peak load threshold in OTR? in each ISO?
 - How much advance warning will companies have?
 - **How will emission reduction obligation be measured? Note: This is key question**
 - How will baseline emissions be established?

HEDD Unit Control Strategy Issues/Questions (Cont'd.)

- **What is the timetable for the short-term emission reduction target (Jan. 1 '09, May 1, 2009, Jan. 1, 2010)?**
- **What flexibility will be allowed in achieving short-term emission reduction requirements?**
 - **averaging on systemwide basis, intra-state basis, inter-state basis?**
 - **allow surplus emission reduction from non-HEDD units?**

HEDD Unit Control Strategy Issues/Questions (Cont'd.)

- *What is envisioned in terms of a voluntary emission reduction commitment?*
 - **MOU?**
 - State enforceable?
 - Federally enforceable?
 - SIP implications
 - **Monitoring requirements?**
 - **Reporting requirements?**
 - **Penalties for non-compliance?**