

Abatement Opportunities and Abatement Costs at Existing Coal Generation Units

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What Can We Learn from the Operation of Existing Coal Generation Units?

- Observe operation and efficiency at coal units 1985-2009
- Document heterogeneous heat rates and estimate abatement opportunities
- Estimate abatement costs and compare policy designs
- Results available soon in RFF Discussion Paper: “Regulating Greenhouse Gases from Coal Power Plants under the Clean Air Act”

Figure 1: Heat Input vs. Heat Rate (2008)

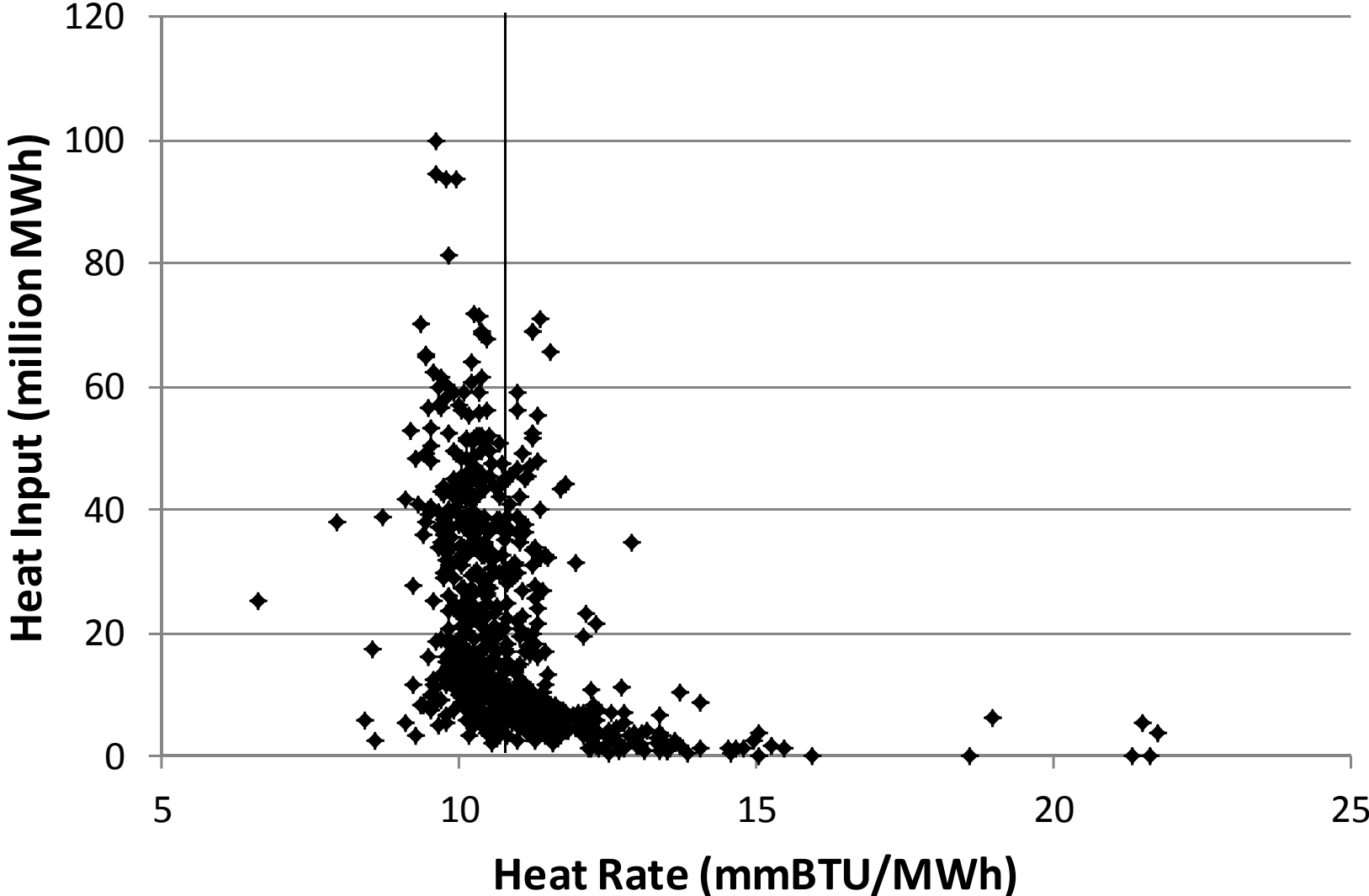
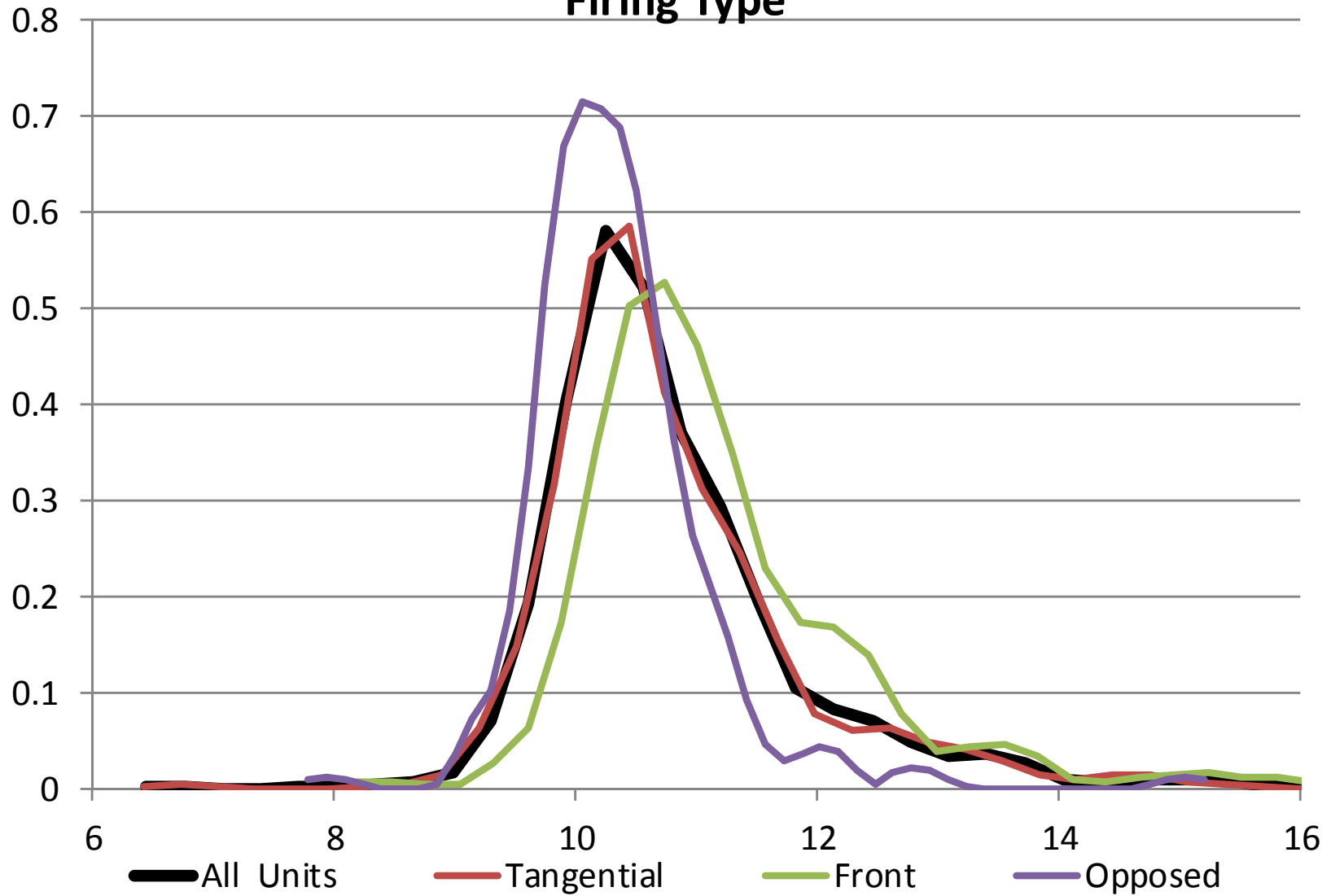


Figure 2: Estimated Heat Rate Distribution by Firing Type



Results

- Heterogeneity suggests significant abatement opportunities exist, up to 5 percent emissions reduction
- Costs appear to be as low, or lower, than engineering estimates
- Evidence of small bounce-back (“rebound”) effect
- Analysis suggests benefits of flexibility