GHG Update

CIBO Environmental Committee March 4, 2014

Overview

- GHG NSPS for New EGUs
- GHG NSPS for Modified/Reconstructed EGUs
- GHG NSPS for Existing EGUs
- GHG NSPS—Next in Line?
- Social Cost of Carbon as Important Overlay
- Biomass & PSD for GHGs
- GHG BACT Determinations

GHG NSPS for New EGUs

- EPA just announced a 60-day extension of the comment period, to May 9th; no firm promulgation schedule
- EPA also just released a NODA explaining why CCS is an "available technology"
- Key issues for non-utilities:
 - Reliability of electrical generation
 - CCS as BSER for new units—can it be limited to EGUs in future BACT determinations?
 - Will essentially end construction of new coal-fired capacity, reducing fuel flexibility
 - Inclusion of simple-cycle gas turbines is inappropriate
 - Concern about treatment of CHP

GHG NSPS for Modified or Reconstructed EGUs

- All we know is the schedule:
 - Proposal June 1, 2014
 - Promulgation June 1, 2015

GHG NSPS for Existing EGUs

- Administration and EPA maintain the schedule in the President's Climate Action Plan holds: proposal June 1, 2014, final June 1, 2015, state plans due June 1, 2016
- EPA has reached out to a variety of stakeholders, have lots of competing ideas to choose from
- Simplistically, there are three options:
 - Emitting unit only, sometimes called "inside the fenceline"
 - A systems-wide approach, which could encompass programs like utility demand-side management programs, state RPS programs, and/ or cap & trade programs like RGGI or AB32
 - A "hybrid" approach that would base required emission reductions on the inside the fenceline approach, but allow states to make equivalency demonstrations using a systems approach

GHG NSPS—Next in Line?

- Details are unclear, but statements from EPA suggest the queue looks something like this:
 - Oil & gas production
 - Refineries
 - Chemicals (after this it's a bit more uncertain, with the following three at the top, though order uncertain)
 - Cement
 - Industrial boilers
 - Pulp & paper

Social Cost of Carbon (SCC) as Important Overlay

- SCC: Cost to society of emitting every ton of carbon
- SCC developed by "secret" Interagency Work Group using three "integrated assessment models"—little/no opportunity for public comment, no formal peer review—current value is \$37/ton (2007\$)
- Industry—number too high, doesn't reflect uncertainties in models, doesn't follow OMB guidelines for public review, use of discount rate, focus on US-only impacts
- ENGOs: number too low, model runs 5 years old, number doesn't reflect all climate-related damage
- Concern: SCC will be used to justify increasingly expensive climate regulations; already being cited in permitting space by ENGOs

Biomass & PSD for GHGs

- Status: Biomass CO2 deferral vacated by Court, but mandate delayed to allow Supreme Court to weigh in on PSD for GHGs; deferral will end anyway in July
- EPA working on "biomass accounting factors", rule on how to fold this into PSD program; schedule still unclear
- Appears EPA inclined to say combustion of biomass residuals, by-products & co-products results in carbon neutral emissions; unclear how EPA will address whole-tree chipping & combustion, fermentation processes, and other biomass uses
- Unclear what happens if rulemaking isn't finalized by July and company wants to get a permit for source combusting/using/ processing biomass

Status of GHG BACT Determinations

- EPA Region 6 soon out of GHG PSD analyses
- ENGOs increasingly focused on GHG BACT process across the board, multimillion \$ war chest for BACT reviews and comments
- Recent examples:
 - ExxonMobil olefins plant
 - La Paloma combined cycle gas turbine plant
 - Freeport, Texas LNG terminal
- Lessons learned, areas to focus on:
 - CCS justification
 - Technology choices
 - CO2e emission limits