

Technical Focus, Energy & Environmental Committee Meetings

<u>March 4-5, 2014</u> Radisson Hotel, Reagan National Airport Arlington, VA (703) 920-8600

MINUTES

TUES-WED March 4-5

TECHNICAL FOCUS GROUP SESSION

Jason Philpott, Eastman Chemical Company, Technical Committee Chairman

Combined Heat and Power

Nate Verhanovitz of Michigan State University reported on the heat rate issues and future emissions of combined heat and power. The university power plant has to provide a reliable, cost efficient energy source for the university campus. The primary steam load is heating during the school year. There is a lot of variability due to seasonal changes, administrative loads, campus events, occupancy differences, and summer cooling loads. The fuels include biomass, natural gas, and coal. At this plant, the boiler produces higher temperature and pressure steam for use in a steam turbine and then uses the steam at the temperature and pressure required by the campus. The plant puts out more energy in the form of steam than in electricity.

The thermal efficiency of the plant (output divided by input) was 65.3% in January. It is important to know the steam load and electric load very well. Since the plant went into service in the early 60s, the percentage of energy supplied by steam has decreased from 91% to 81%. This means that the system is getting out of balance. If the plant is run to meet the steam demand, less electricity will be produced. If more electricity is needed, either another generator is required or power must be purchased from the grid. In the worst case, there is a gap of 32 Mw compared to production of about 25 Mw.

In the traditional plant, self-generation would involve using steam to generate additional electricity. In order to balance the plant, a combined cycle could be used. The advantage is that the electricity is produced first in the gas turbine. That tends to make the combined cycle "electricity rich". In this case, the "first order" fuel savings would be about 20%. For emissions control, dry sorbent injection was used for acid gas control (primarily HCI). Hydrated lime was the sorbent. With the DSI, the plant was able to meet the MACT limits. One surprising result for this plant was that the boilers actually make more steam on gas than on coal for the same BTU input. Data was incomplete (ie excess air and carbon in the ash was not reported). The trend towards greater electric demand is expected to continue going forward.

John Hodge of Black and Veatch Corporation provided a case study on combined heat and power. John noted that in 1897, the University of Michigan installed a back pressure turbine to produce 75 Kw for combined heat and power. Coal was the typical fuel. In these plants, steam was the primary interest. Typically more than 20 lbs. of steam were produced for every kilowatt hour of electricity that was produced. In the second half of the 20th century, a lot more electrical consumers were being presenting the Interest of America's Industrial Energy Users Since 1978

installed, while heating loads were being reduced by better insulation, better windows, and better building design.

The Michigan State plant was designed to generate steam at 865 psig and 835 F. A condensing turbine with extraction steam was used to generate both steam for the campus and electricity. The steam to the campus is at 90 psi and 385 F. In this case, the steam flow to generate electricity is reduced to 10 lb/Kwhr. The energy output works out to be 16% for campus electricity, 5% for plant electricity, 47% for campus steam, 13 % for plant steam, and 19% rejected to the atmosphere (cooling tower).

A combustion turbine produces electricity without any steam. Less steam implies less water treatment and less cooling tower. If coal use can be reduced, the auxiliaries such as the pulverizers, conveyors, fans, etc. can be reduced. For a combined cycle, a gas turbine and a steam turbine can be combined together using a heat recovery steam generator (HRSG). In the case where the steam turbine is a back pressure turbine, all of the steam can be sent to the campus. If natural gas at the required pressure is not available, a gas compressor will be required. Duct firing in the HRSG can provide additional flexibility to produce more or less steam when needed. The overall thermal efficiency is 70%. The potential steam use is now 3.5 lb steam/Kwhr. With duct firing, the overall thermal to electric load is less than 15 lb/Kwhr, a combined cycle plant can provide the flexibility.

Leslie Witherspoon of Solar Turbines Incorporated provided a case study on gas turbines and combined heat and power. A number of different types of facilities are considering combined heat and power. There are currently more than 82 Gw of CHP in industrial and commercial facilities generating 9% of US electricity. The US President set a goal via executive order of 40 Gw of new CHP over the next decade. Benefits include better efficiency, reliability, and reduced emissions. Facilities that have electric loads in the range of 1 - 50 Mw and steam loads greater than 10,000 lb/hr are generally good candidates for CHP.

For 10 of the GTs supplied by Solar Turbines Incorporated, there are steam loads with and without supplementary firing. Presuming that the demand loads fit into the right range, the next step is to determine if the budget for equipment makes sense. Solar Turbines Incorporated has a "cogen estimator" that does a first cut at this analysis. After this analysis a more detailed analysis can be undertaken with an A/E.

Permitting issues are still a challenge, even with natural gas fired equipment. Emissions for NOx, CO, particulates, and CO2 on an annual basis have been characterized for standard machines at 2000 ft elevation, 59 F, and 60% relative humidity. The permit process will start with PSD and NSR considerations. This will determine BACT and LAER requirements. Federal NSPS levels are about 25 ppm for NOx. BACT is down to 15 ppm and LAER is down to 2 ppm. States may have more stringent requirements (CT wants controls on everything regardless of rate). CO BACT levels range from 2 - 50 ppm depending upon the state.

The Tailoring Rule could have an impact as plants with more than 100,000 t/yr CO2 are considered a major source and will trigger PSD for greenhouse gases. This implies that plants over 20 Mw will trigger PSD. Once the trigger for PSD is hit, the significance level for NOx drops from 250 t/yr down to 40 t/yr. Many plants are using SCR to reduce NOx below the 40 t/yr in order to avoid air shed modeling. Additional permitting issues include netting and NSPS/MACT. These permitting issues



tend to make it more difficult to develop a CHP plant. Texas has developed a "permit by rule" basis for natural gas fired CHP. This approach provides a direct path to get a permit quickly for CHP plants in Texas.

ENERGY SESSION

Frederick (Fred) P. Fendt, The Dow Chemical Company, Energy Committee Chairman **Robin Mills Ridgway**, Purdue University, Energy Committee Vice-Chairman

Grant MacIntyre of Bracewell & Giuliani LLP gave the anti-trust admonition. **Robert (Bob) Corbin, CIBO Member Consultant** introduced the new members and guests in attendance at the meetings. The usual "round the table" introductions were done.

Ross Eisenburg of the National Association of Manufacturers reported on the "Partnership for a Better Energy Future" program for reliable and affordable energy. This program is an attempt to ensure the continued availability for reliable and affordable energy for American families and businesses. The interpretation of the president's climate action plan is that this administration wants to drive the US off of fossil fuels, including natural gas. This position has united the NAM membership. There are currently 100 members in the partnership. The concern is that the precedent is being set to eliminate coal in the US for power generation. This precedent can then, in turn, be applied to other industries to mandate what fuels can and cannot be used. The goal is to get industry together to try to bring EPA to a better regulation.

Jacob Smeltz of the Pennsylvania Electric Power Generation Association reported on power generation issues of the member companies representing 125 GW generating capacity. Power sources include coal, nuclear, gas, wind, solar, hydro, and pumped storage. Pennsylvania is the second largest generating state (after Texas) and the largest power exporter.

Natural gas has been a game changer. Demand response and energy efficiency mandates have dominated growth due to state incentives and over compensation in wholesale markets. Wholesale markets continue to be skewed by RPS mandates and other subsidized forms of energy. Coal generation has dropped from over 90% of generation in the 60s to about 33% of generation today. Over 85 % of the planned capacity going forward is natural gas. Demand Response programs are effectively suppressing electric demand, which, in turn, suppresses prices.

Although demand response is treated like capacity, limited demand response only has to be available 60 hours/yr, but gets paid for 8,760 hours/yr. Some demand response merely shifts use. Starting up a stand by diesel generator on a hot day to generate additional power does not necessarily reduce emissions.

Artificial price subsidies merely distort the market. From 2000 - 2012, emission reductions have averaged nearly 75% for criteria pollutants and 21% for CO2. The Regional Transmission Organizations and Independent System Operators are preparing a counter proposal to the current GHG NSPS.

Jason Philpott, Eastman Chemical Company, initiated the round table on BMACT Energy Assessment Tune Ups and Compliance. There did not appear to be any major sources that had already completed the energy assessment. There was still some issue with the hours that count towards the assessment. The wording in the rule is poorly written. For Area sources, the tune up



and energy assessment are due shortly. There was one assessment done on an oil fired plant. In another case, a bubbling bed firing biomass was tuned up. The chutes delivering the fuel were treated as burners. Some creative writing was needed to make the document conform to requirements. No one in the room was planning to use the ISO 50001 exclusion. There were about 15 or 16 companies that currently have coal fired boilers in the room. Of those, more than half plan to continue to operate coal fired boilers. A similar number are converting some coal fired boilers to gas.

Government Affairs Session

Anthony Reed, Archer Daniels Midland Company, Government Affairs Committee Chairman

Bracewell & Giuliani LLP has been retained to help prepare positions and papers for issues of importance to CIBO members. **Salo Zelermyer** of Bracewell & Giuliani LLP gave the current political overview with the appropriate policy update and forecast. The federal government, under the current administration, has been more active in regulatory matters than previous administrations. Even though this year is not likely to see a lot of legislation, it is important to build relationships so that our point of view will be heard when the time comes. Furthermore, while Congress may not produce significant amounts of legislation in 2014, the Legislative Branch will still play a critical role in oversight and budgetary matters. It is critical that we develop strong relationships with the House and Senate committees of jurisdiction.

Jason Herbert of Bracewell & Giuliani LLP said this year is a mid-term election year. The Republicans would like to regain control of the Senate. They need 6 seats to do so. This will be an uphill struggle. There are 3 seats where they have a good chance. There are 2 contested Republican seats that will need to be held. That leaves 3 other seats to pick up. There are 36 Senate seats up for reelection (21 Democrat and 15 Republican). In the House of Representatives, Democrats would need to win 17 seats to take control. Given the advantages of incumbents, this outcome is not deemed likely.

One of the major issues will be the Affordable Care Act (Obamacare). Others include: minimum wage, immigration reform, income inequality, and energy. The administration has indicated that it will continue to use Executive Orders and regulatory policy to achieve its goals (the "pen and phone") strategy. There will likely be tradeoffs on some of these issues. The House will continue to hold hearings on key issues related to Obamacare, and EPA regulations. There will be messaging bills for the mid-term elections. Energy efficiency has support, but regulatory policy there is difficult. Coal ash may get some attention. Senator Max Baucus (D-MT) has departed as Chairman of the Senate Finance Committee to become Ambassador to China. Senator Ron Wyden (D-OR), who was Chariman of the Senate Energy and Natural Resource Committee, replaced Baucus as Chair of the Finance Committee. Senator Mary Landrieu (D-LA)_has replaced Senator Wyden as Chair of the Senate Energy and Natural Resources Committee.

Lunch Speaker - Jay Wrobel, US DOE, Advanced Manufacturing Office

Jay Wrobel, US DOE, Advanced Manufacturing Office (AMO), ran the Midwest Energy Efficiency Office prior to joining DOE in October. The focus of the Advanced Manufacturing Office is to increase US manufacturing competitiveness through industrial efficiency, manufacturing innovations, general technology improvements, and technical assistance to American manufacturers. The AMO sees itself as being in between the R&D organizations and the manufacturing organizations to aid in the adaption and commercialization of new technologies.

Critical R&D areas include critical materials, manufacturing demonstrations, next generation power electronics, additive manufacturing innovation, and advanced composites. ORNL has the manufacturing demonstration lab, which is outside of the nuclear compound so that visitors do not need security clearance. The technical assistance program aims to help companies to reduce their energy use, amongst other improvements.

The "Better Plants" program calls for a 25% reduction in energy intensity over a 10 year period. Over 120 "program partners" covering over 1750 plants are currently part of the program. Partners implement energy efficiency improvements that save money, create jobs, promote energy security, and strengthen US manufacturing.

The Superior Energy Performance program builds off of ISO 50001. This program verifies actual energy performance by an independent 3rd party. There have been 15 SEP certified plants that have improved their energy performance between 6 and 25% over a 3 year period. Paybacks have been less than 2 years, with the majority being less than 1 year. There are Industrial Assessment Centers that target small and medium size manufacturers with free energy assessments (1 day walk through). On average, these assessments have resulted in \$46 K in annual savings.

There are also CHP Technical Assistance Partnerships to help promote CHP. There is a DOE Boiler MACT Technical Assistance Program. Over 482 companies contacted DOE. Of these, 167 felt that they would be in compliance and 67 went out of business.

ENVIRONMENTAL COMMITTEE SESSION

Stephen (Steve) Gossett, Eastman Chemical Company, Environmental Committee Chairman Robert (Rob) Kaufmann, Koch Companies Public Sector, LLC, Environmental Committee, Vice-Chairman

Gary Merritt of Inter-Power/AhlCon Partners, L.P., gave an update on the coal ash proposed regulations. EPA has entered a consent decree to publish a final action regarding Coal Combustion Residuals by Dec. 19, 2014 under subtitle D. The Effluent Limitation Guidelines for Steam Electric Generating units are supposed to go final in May. EPA notified the court that it will not make the date. EPA has also started a web site on beneficial use of fly ash. For the most part, they are only dealing with encapsulated use. Un-encapsulated use will come later. The House passed a bill requiring a subtitle D designation for coal ash. A bill has not come forth in the Senate. EPA has claimed the right to decide either way, although the thinking is that it would be subtitle D. Although the proposed regulation is written to only apply to utility units, the likelihood is that the regulations would apply to all combustion residuals, as is the case presently.

Rob Kaufmann of Koch Companies Public Sector, gave the NAAQS update. The issues include ozone, NO2, SO2, PM2.5, and permitting. EPA has released its second draft of the ozone "Policy Assessment". The recommended standard was supposed to be in the range of 60 - 70 ppb. The potential of 55 ppb was eliminated. The prior proposal in 2012 was 65 ppb. Industry pushed back for 70 ppb. President Obama pulled the rule back leaving the 2008 rule in place. Sierra Club has asked for a new proposed rule by December 1, 2014 with promulgation by Oct. 2015. EPA has responded with a Jan. 2015 and Nov. 2015. Sierra Club also indicated their intent to sue over prior data, asking EPA to re-designate 57 areas to non-attainment. With a 70 ppb limit, over 70% of the US would be



non-attainment. With 65 ppb, over 80% would be non-attainment. With a 60 ppb limit, 97% would be in non-attainment.

The current NO2 standard is 53 ppb for annual and 100 ppb for one hour. A new proposal is plant for February of 2016. A draft assessment is calling for tighter standards. This report is being challenged. On SO2, substantial litigation followed the EPA listing for 29 non-attainment areas by all parties (ENGOs, states, and industry). A 2 step process is being proposed that would locate new monitors, with the potential for modeling if the cost and time frame of monitors is excessive. The modeling is supposed to be allowed to use actual emissions rather than allowable emissions, which is more reasonable.

On PM2.5, we are still waiting for PM2.5 guidance, SIP requirements, and SIL reconsideration. The DC circuit oral arguments seem to favor EPA. However, PM2.5 SILs and SMCs were remanded to EPA for further justification. Locating monitors near roadways was deemed to be potentially detrimental to industry by showing a higher concentration.

The CSAPR replacement is under development and will likely deal with ozone and NOx. The likelihood is that industrials will be included. The permitting issue has been received by EPA with promises to make the process easier. However, EPA keeps missing its own deadlines and continues to have "budget issues" with modeling, monitoring, test methods, and emission factors.

Dean Ritts of WorleyParsons Group Inc. reported on water/waste water issues. The Effluent Limitation Guidelines apply to Steam Electric Generating Units. EPA was ordered by the court to evaluate the impact of air regulations on water discharge. The proposed rulemaking was done April 19, 2013. The rule was supposed to go final in May of this year. EPA has advised that they will not meet the May date and will file a motion to extend the date to September, or possibly later in conjunction with the coal ash rulings.

The CIBO comments and Duke comments are worth reading (especially Duke). Evaluate permit requirements as some authorities are already trying to issue permits with tighter limits in anticipation of these limits in the hopes of not having to re-issue the permit. The most onerous control is biological treatment for selenium with additional requirements to prepare the water for the treatment.

Ann McIver, Citizens Thermal reported on the 316 b rule. The deadline for the final rule has been delayed for 2 years already and is due in April. It may be delayed again due to the elections. The rule implies to all intake cooling system for power. It does not apply to drinking water intakes. The assumption is that any impingement of fish against intake screens causes mortality of fish. Any facility greater than 2 MM gal/day is subject to site specific requirements. The driver is to get units to use cooling towers rather than once through cooling.

Just to start the study to evaluate the impact took \$200,000. In 316 a, there are temperature limits for heated water waste streams. New sources are required to have closed loop cooling. There is no federal protocol for the field studies. The regional EPA offices are demanding numerical limits and using "Best Professional Judgement". There are similarities in the field studies that are required for 316 a and 316 b. These field studies should be coordinated.

There is also a proposed rule on the "waters of the US" (WOTUS), which would trace the source of tributaries back to any potential ditch that could possibility be connected to a stream which leads to a



tributary to a river. These will all be considered to be "waters of the US" which EPA would claim that it has rights to regulate (even if it is on private property). There will obviously be law suits over this proposal.

Rob Kaufmann of Koch Companies Public Sector, gave an update on Greenhouse Gas issues. In the president's proposed budget, EPA will get an overall budget cut, but an increase in budget for the president's climate action plan. EPA will have more budget money for CCS demonstration projects. There has been an extension for comment on the proposed GHG NSPS. EPA has released a Notice of Data Availability (NODA) on why CCS is an "available technology". However, in their explanation, they relied on some DOE funded demonstration projects. The language in the supporting legislation specifically prohibits this interpretation. It is likely that this issue will be litigated.

Simple cycle gas turbines have also been included in the new proposal. Modified or reconstructed units have been separated from new units. These units will be covered when the EPA puts out its proposed rule for existing sources in June. At this point in time, there is limited intelligence on what is likely to be in such rules. There could be a unit by unit approach evaluating energy efficiency options.

Environmental groups are proposing a system wide approach that a state could take credit for demand side management programs, RPS programs, and cap and trade programs. There could be a hybrid version of these two. One concern about a system wide program is that the utilities may come to industrial companies for demand side management programs. Then, when there is an industrial GHG NSPS, industrials will not be able to come up with additional reductions.

EPA has hinted that after utilities there will be GHG NSPS for oil and gas production, refineries, chemicals, cement, industrial boilers, and pulp & paper. There was a change in the estimated "social cost of carbon". The original interagency work group used three "integrated assessment models" to come up with an average with little public comment. The current number is \$37/ton of CO2. OMB has requested comment on this issue. This could be another source of litigation. The DC Circuit Court vacated the biomass CO2 deferral. The EPA is working on "biomass accounting factors". In the interim, it may be difficult to get a permit for biomass fired units. ENGOs are now moving to challenging gas fired plants and are looking at GHG BACT on combined cycle plants. Recent examples include an Exxon Mobil olefins plant, the La Paloma combined cycle gas turbine plant, and the Freeport, TX LNG terminal.

Jay Hofmann, Trinity Consultants, Inc., reported on modeling activities. There has been a resurgence in development in the last few years being driven by the new 1 hour NAAQS standards. The National Weather Service changed the way it collected meteorological data some years back with an Automated Surface Observing System. The automated system cannot recognize clouds above 12,000 ft. This causes some issues with buoyancy calculations. There were also issues with low wind speeds and variable wind directions. AERMOD cannot model zero wind speeds. EPA has noted that the data is available, but not reported accurately. EPA has come up with a new sub model called AERMINUTE. This model takes into account the lower wind speeds and variable wind direction. In the ranges of interest, the new models still over predict.

For PM2.5 permit modeling, the court vacated the SILs and SMCs. EPA is using these figures for significance analysis as "guidance". EPA has re-issued a draft document for SO2 modeling. Since SO2 sources tend to be concentrated, it is often difficult to site monitors that actually catch the plume. Thus, modeling takes on more significance. In future rule making, EPA will establish requirements for



characterizing which units should be modeled. In the Technical Assistance Document, 3 years of actual emissions, 3 years of meteorological data, and actual stack heights are being required for the modeling. The EPA time line calls for modeling based designations to be submitted in 2017 and finalized in 2020. The States would then finalize their SIPS by 2022.

Ann McIver, Citizens Thermal, noted that the two technical conferences are intended to provide a more coordinated approach. The Fluidized Bed Combustion XXVII and Stoker Fired Operations and Performance Conference will be more operational. The Industrial Emissions Control Technology XII Conference, Natural Gas Conversion Workshop will be more regulatory compliance oriented. Abstracts are due for the FBC Conference. Abstracts are due for Industrial Emissions Control Technology XII Conference, Natural Gas Conversion Workshop by April 19th. **Ann McIver** is the Chair for the Industrial Emissions Conference. **Gary Merritt,** Inter-Power/AhlCon Partners, L.P and **Robin Mills Ridgway**, Purdue University, are the conference chairs for the Fluidized Bed Combustion XXVII and Stoker Fired Operations and Performance Conference. Contact Bob Bessette with any proposals and suggestions. Also, the CIBO website has information on the conferences.

Steve Gossett, Eastman Chemical Company, reported on the fuel and waste determinations that would lead a unit to classify as a waste incinerator under CISWI. If the material is a traditional fuel, it is not a waste. If the material is a secondary material (off spec, intermediates, scrap), the next step is to determine if it has been discarded. If this material has been processed to improve the material into a fuel, then it is a fuel. The next step is to determine if the waste is hazardous. If so, special rules apply. The waste material can then be identified as scrap tires, resinated wood, coal refuse, or dewatered pulp and paper sludges that are burned for energy recovery as acceptable. If the waste is not one of these materials, a petition would be required to get a fuel designation. Criteria for designation include treating the material as if were fuel, maintaining on site, having meaningful heating value, and having contaminants similar to those found in the fuel the boiler was designed for.

Boiler MACT and Litigation Update

John C. deRuyter, E. I. DuPont de Nemours & Company Lisa Jaeger, Bracewell & Giuliani, LLP

John C. deRuyter, E. I. DuPont de Nemours & Company, noted that the court remanded the 99% UPL and that EPA has asked for users to provide some help on this subject. The 99% UPL appears to work OK for substantial data sets, but less so for small data sets. As a result, EPA is proposing a full remand of the Area Source, Major Source, and CISWI rules in order to address this issue, particularly for standards that were set based on 9 or fewer data points. For Area Sources, this would apply to the mercury and CO limits, but not the GACT rules. There are 5 categories that would be looked at. There are two more that probably should be looked at. For new units, most of the categories would be reviewed, although not all limits are being reviewed. There is an open issue as to whether additional law suits could be forthcoming on the whole rule. EPA needs to bolster the process. The EPA motions are to remand the record for 60 days to better explain variability analysis, to remand specified MACT standards w/o vacatur for new and existing units based on 9 or fewer data points, and to stay the briefing schedule to 30 days after the remands (60 days for CISWI).

Lisa Jaeger, Bracewell & Giuliani, LLP, pointed out that the Sierra Club is opposing the BMACT and CISWI remand of the record. They have not opposed the Area Source remand or the stay of the briefing schedule. Industry is primarily concerned with the compliance date. The court is likely to



remand. The timing adds 3 months to the BMACT briefing and puts the Area Source brief ahead of BMACT, while NHSM goes forward alone. There are several issues with the rules that are currently pending litigation. The remand would add 3 months to the affected briefs. We would like to preserve the order of the briefing schedule and would propose a 90 day extension for all briefs.

There is also a reconsideration activity on the part of EPA. For Boiler MACT, the startup and shut down periods, the revised CO limit, and the use of continuous parameter monitoring systems (CPMS) were the issues to be reconsidered. For CISWI, the startup and shut down issue and the PM limits were to be reviewed. For Area, the startup and shut down was also to be reviewed. The Area Source may get separated. EPA would like to have a "bright line" approach to start up, such as 25% load plus 4 hours. EPA has data on SO2 and NOx emissions on start up, but little on particulates.

The environmental groups have seized upon this for challenging the startup work practice approach. **Amy Marshall**, URS, has put together a table with the potential start up issues to be reviewed. In addition to the above, the utility rule offered a work standard practice for CO. In the Boiler MACT there is a numerical limit (130 ppm). CIBO will continue to discuss the impact of this standard.

On other litigation, the MATS oral argument was held in December. There are overlapping issues with Boiler MACT including subcategories, emissions averaging, PM monitoring alternatives, CEMS unit tighter standard, achievability, fuel switching, and area sources. The CSAPR oral arguments went to the Supreme Court in December. Issues include upwind authority, states jurisdiction, and state SIP plans. The PM NAAQS case went to oral argument in February. The main discussion was on what is requisite for public health. Another issue was the placement of monitors near roads (increasing the level of PM). The GHG PSD argument went to the Supreme Court in February. The issue is GHGs are not a criteria pollutant and thus should not be subject to PSD. One outcome could be that only units that triggered PSD for other criteria pollutants would be subject to GHG BACT. On the ozone NAAQS, the secondary standard for open was remanded. The primary standard of 75 ppb was upheld. For the new standard to be proposed, the Sierra Club is planning to file for a hard date.

<u>Next Technical Focus Group/Environmental & Energy Committee Meetings</u> <u>TUESDAY & WEDNESDAY, June 10-11, 2014</u>

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