Appendix

to
E&E Legal Report

The Complete Compilation of Source Material
To Michael Goo, Alex Barron

cc

Subject: Zombie's

Michael and Alex:

Attached is a list of plants that the companies said were shelved because of uncertainty around GHG regulations. If a standard is set that these plants could meet, there is a not small chance that they company could decide to revive the proposal.

John Coequyt
Sierra Club
DL: 202.675.7916

C: 202.669.7060

Defeated Plants - GHG - 2011.xls
Michael and Alex:

Attached is a list of plants that the companies said were shelved because of uncertainty around GHG regulations. If a standard is set that these plants could meet, there is a not small chance that they company could decide to revive the proposal.
Hammit, Jennifer

From: Goo, Michael
Sent: Tuesday, August 27, 2013 3:44 PM
To: Kimc, Robin
Subject: 8
Attachments: SO2 Master Spreadsheet - Draft to Josh 101812.xlsx

From: michael Goo
Sent: Monday, August 19, 2013 2:13 PM
To: Goo, Michael
Subject: Fw: Fwd: Sahu Spreadsheet - please send to all

----- Forwarded Message -----
From: Goo, Michael
Sent: Friday, October 19, 2012 8:26 AM
To: Philip Goo
Subject: Fw: Fwd: Sahu Spreadsheet - please send to all

From: Philip Goo
Date: Fri, 19 Oct 2012 08:24:36 -0400
To: Philip Goo
Subject: Fwd: Sahu Spreadsheet - please send to all

---------- Forwarded message ----------
From: Josh Stebbins
Date: Friday, October 19, 2012
Subject: Fwd: Sahu Spreadsheet - please send to all
To: Philip Goo <Philip.Goo@sierrachub.org>, John Coeuyt <john.coequyt@sierraclub.org>, Robert Ukeiley <rukeiley@igc.org>, Zachary Fabish <zachary.fabish@sierraclub.org>
Cc: Ranajit Sahu <sahuron@earthlink.net>

Attached please find a spreadsheet reflecting Ron's analysis on SO2 v MATS.
If you will not be in today's meeting in person, please use the following call in number at 3pm:

Thanks
josh

---------- Forwarded message ----------
From: Ranajit Sahu <sahuron@earthlink.net>
Date: Fri, Oct 19, 2012 at 1:03 AM
Subject: Sahu Spreadsheet - please send to all
To: josh.stebbins@sierraclub.org
Hammitt, Jennifer

From: Geo, Michael
Sent: Tuesday, August 27, 2013 3:44 PM
To: Kime, Robin
Subject: 8
Attachments: SC2 Master Spreadsheet - Draft to Josh 101812.xlsx

From: michael Goo[redacted]
Sent: Monday, August 19, 2013 2:13 PM
To: Geo, Michael
Subject: Fw: Fwd: Sahu Spreadsheet - please send to all

----- Forwarded Message -----
From: [redacted]
To: [redacted]
Sent: Friday, October 19, 2012 8:28 AM
Subject: Fw: Fwd: Sahu Spreadsheet - please send to all

From: Philip Goo[redacted]
Date: Fri, 19 Oct 2012 08:24:56 -0400
To: Philip Goo[redacted]
Subject: Fw: Sahu Spreadsheet - please send to all

---------- Forwarded message ----------
From: Josh Stebbins
Date: Friday, October 19, 2012
Subject: Fwd: Sahu Spreadsheet - please send to all
To: Philip Goo <Philip.Goo@sierrachub.org>, John Coequenti <john.coequenti@sierrachub.org>, Robert Ukeiley <rukeiley@jirc.org>, Zachary Fabish <zachary.fabish@sierrachub.org>
Cc: Ranajit Sahu <sahurom@earthlink.net>

Josh

I am having e-mail issues and the file did not go through to all of the others that you wanted me to send to including Philip Goo, etc. Can you please send to all. Sorry about this.

Thanks

Ron

Joshua Stebbins
Managing Attorney
Sierra Club
50 F Street, NW, Eighth Floor
Washington, DC 20001
202 675 6273
202 547 6009
Bob Sussman/DC/USEPA/US
02/24/2009 08:33 AM
To  "Buffa, Nicole"
cc  "Carson, Jonathan K."

Subject  Re: FW: mountaintop mining info

Hi Bob - Attached is an email I received...
02/24/2009 07:51 AM

"Buffa, Nicole"

To  Bob Sussman/DC/USEPA/US@EPA
cc  "Carson, Jonathan K."

Subject  FW: mountaintop mining info

Hi Bob - Attached is an email I received from Ed at the Sierra Club.
Thanks for talking with us about the issue yesterday.

Thanks,
Nikki

-----Original Message-----
From: Ed.Hopkins@sierraclub.org [mailto:Ed.Hopkins@sierraclub.org]
Sent: Monday, February 23, 2009 6:59 PM
To: Buffa, Nicole
Subject: mountaintop mining info

Nikki,

Here is the info on mountaintop mining permits that could go forward at any time. (This is in a somewhat easier-to-read format than I was able to send any on Friday.)

There are two sorts of permits.
The first 15 or so were the subject of the recent Fourth Circuit case. The Corps has issued those, and they are on hold until March 12 unless a court decides to allow mining earlier.

The best solution to this, from our point of view, is for CEQ to tell the Corps to put these permits on hold until the administration has a chance to re-think mountaintop removal mining.

Thanks, and please let me know if you have questions or need any info.

Ed Hopkins
Sierra Club
408 C Street, NE
Washington DC 20002
202-675-7908 voice
202-547-6009 fax
ed.hopkins@sierraclub.org

(See attached file: Pending IPs in WV and KY as of 2-23-09 LT edits.xls)

Cited in FN 9
Our people have raised exactly the same concern. Something should be done quickly.

Robert M. Sussman
Senior Policy Counsel to the Administrator
Office of the Administrator
US Environmental Protection Agency

Here's the second

-----Original Message-----
From: Ed.Hopkins@sierraclub.org [mailto:Ed.Hopkins@sierraclub.org]
Sent: Friday, February 20, 2009 7:05 PM
To: Salzman, Amelia S.
Subject: mountaintop removal info

Amy -

Thanks for calling. Here is the spreadsheet on pending mountaintop removal permits that I mentioned. It was compiled by the Appalachian Center for the Economy and the Environment. He was the lawyer on the Fourth Circuit case.

If the Corps issues these permits, which it could do at any time, it would very quickly result in the destruction of 98 square miles of Appalachia and the burial of more than 200 miles of streams. We hope that the administration could impose a timeout on issuing all these permits until it has an opportunity to consider its policy on mountaintop removal mining and the Bush policy allowing waste material to be used to fill streams.

Thanks, and please let me know if you need anything.

Ed Hopkins
Sierra Club
408 C Street, NE
Washington DC 20002
202-675-7908 voice
202-547-6009 fax
ed.hopkins@sierraclub.org

------ Forwarded by Ed Hopkins/Sierraclub on 02/20/2009 06:46 PM ------

"Joe Lovett"
<jlovett@appalach
dian-center.org>

To
<maryanne.hitt@sierraclub.org>,
<Ed.Hopkins@sierraclub.org>,
<aaron.isherwood@sierraclub.org>

02/20/2009 03:51
PM

Subject
permit impacts spreadsheets

(See attached file: Pending IPs in WV and KY as of 2-19-09 final.xls)
Lena Moffitt  
<Lena.Moffitt@sierraclub.org>  
07/29/2011 04:24 PM  

To  Alex Barron  
cc  
bcc  

Subject  Have a second to talk NSPS?

Wanted to check in with you to see where things stand. We've been a bit out of the loop over here with John on vacation. I'll be at my desk till 5 if you have a minute.

Lena Moffitt  
Washington Representative  
Sierra Club  
(202) 675-2396 (w)  
(505) 480-1551 (c)
Can you go. Sadly it's at 10am.

--

John Coequyt
Sierra Club
202-669-7060

Subject: Fw: Clean Air Act Title V Petition - Big Stone

Dear Patricia,

Is it possible for you all to put together a short summary of the arguments that the Sierra Club made on why GHG are currently regulated under the CAA? Gina would like to get a copy. It is the Issue#3|section of the attached.

Thanks, Beth

--- Forwarded by Beth Craig/DC/USEPA/US on 08/05/2009 08:36 AM ---
To  Alex Barron, john.coequyt
cc
bcc
Subject  Update: Meeting w/Coequyt & Joanne- See Notes

Location: J.W. Marriott
John Coequyt
Sierra Club
669-7060
Mr. Michael Goo  
Former Senior Advisor  
Office of Energy Policy and Systems Analysis  
U.S. Department of Energy  
3426 Greentree Dr.  
Falls Church, VA 22041

Dear Mr. Goo,

The Committee recently obtained information relating to your use of personal e-mail and text messages to conduct official business and avoid transparency when you served as Associate Administrator for Policy at the Environmental Protection Agency (EPA). According to documents reviewed by the Committee, you seemingly routinely communicated with third party groups attempting to influence the Administration’s agenda. The communications were hidden from the Committee by a Freedom of Information Act request—potentially violating the Federal Records Act. Further, your history of communicating with third party groups through private e-mail and text messages raises concerns that you used similar methods of communications at DOE. These allegations are described in greater detail in the enclosed letters to the EPA Administrator Gina McCarthy and Department of Energy (DOE) Secretary Ernest Moniz. The Committee requests for relevant documents in the custody of the EPA and DOE.

It is reasonably foreseeable that the Committee will request documents from you at some point during its oversight of the aforementioned allegations. So that a full and complete record of relevant communications can be produced to the Committee in response to a document request, please:

1. Preserve all e-mail, electronic documents, and data (“electronic records”) created during your time at EPA and DOE, from 2011 to 2014, that can be reasonably anticipated to be subject to a request for production by the Committee. For the purposes of this request, “preserve” means taking reasonable steps to prevent the partial or full destruction, alteration, testing, deletion, shredding, incineration, wiping, relocation, migration, theft, or mutation of electronic records, as well as negligent or intentional handling that would make such records incomplete or inaccessible;

2. Exercise reasonable efforts to identify and notify former employees and third party groups who may have access to such electronic records that they are to be preserved; and,

3. If it is the routine practice of any agency employee or third party group to destroy or otherwise alter such electronic records, either halt such practices or arrange for the preservation of complete and accurate duplicates or copies of such records, suitable for production if requested.

Pursuant to Rule X of the U.S. House of Representatives, I request that you respond in writing no later than May 21, 2015, to confirm receipt of this letter and to advise the Committee of the actions you will take to comply with the document preservation request contained herein.

If you have any questions about this request, please contact Committee Staff at 202-225-6371. Thank you for your attention to this matter.

Sincerely,

Lamar Smith  
Chairman

cc: The Honorable Eddie Bernice Johnson, Ranking Minority Member
Janet McCabe
Principal Deputy Assistant Administrator
Office of Air and Radiation, USEPA
Room E426K, 1200 Pennsylvania Avenue NW
Washington, DC 20460
202-564-3206
mccabe.janet@epa.gov

Dennis McLerran
To: Janet McCabe
cc: "Rick Albright" "Kendra Tyler"
bcc: "Rick Albright" "Kendra Tyler"

Subject: Re: Fw: A favor

this is the first I've actually seen this letter-yikes....don't know where the mail goes in this place. thanks for the extra info and I'll look forward to more talk about it with you guys.

Janet:
You should have received the e-mail attached below from Sara Patton of the PNNL Political Science and Policy Program. They are asking that you speak on the Agency's outlook on regulation of QAP facilities moving forward. They are a group that promotes a progressive agenda on Pacific Northwest energy issues. They have been key players in passing a citizen's initiative approved by Washington State which required utilities when the legislature was unable to do so. They have actively promoted an energy conservation agenda here for many years and have published a number of very influential reports. They have been advocating that renewables and conservation will be adequate to serve regional energy needs for the foreseeable future and have had a major impact on plans from the Northwest Power Planning Council and regional utilities. Their coalition also includes many of the utilities and is a pretty unique marriage between environmental advocates and the utility industry here.

I will ask my assistant Kendra to try and set up a short phone call for you, me and Rick Albright to discuss this.

Dennis
Air Toxics contacts: Story on coal industry. Pacific Northwest could play crucial role in how coal companies can sell their coal if it isn't being burned in US.
Hello all — I attended the mgit team meeting today on Debra's behalf. If the notes below are too laconic please feel free to drop by and I can give you more detail. ...............jh

(b) (5) DPP

[Redacted]

— During the EPA Senior Staff call, Dennis highlighted the coal export terminals as a big issue for region 10

(b) (5) DPP

[Redacted]

(b) (5) DPP
COAL: Traditional plants are on the rise in U.S. (Tuesday, August 17, 2010)

More than 30 traditional coal plants are under construction or have been completed since 2008, marking the largest expansion in two decades, despite mounting pressure from climate change advocates, high fossil fuel prices and recent disasters.

The expansion, documented through Department of Energy records and utility information, is a sign that "clean coal" technology and renewable-energy power plants are still a long way off and signal that utilities think government action restricting emissions will fail.

"Building a coal-fired power plant today is betting that we are not going to put a serious financial cost on emitting carbon dioxide," said Steven Borenstein, the director of the Energy Institute at the University of California, Berkeley. "That may be true, but unless most of the scientists are way off the mark, that's pretty bad public policy."

Investments in new coal plants, stretching from Arizona to South Carolina to Washington, total more than $36 billion, at least 10 times the $3.4 billion in federal stimulus funds to "clean coal" plants that would capture and store greenhouse gases. Utilities say coal is cheaper than any alternative power source, like natural gas or nuclear power, but the price of coal is rising and consumers could see bills increase by as much as 30 percent.

Dozens more coal plants have been challenged in court by scientists and environmentalists. In fact, a few years ago federal regulators predicted there would be 151 new coal plants. Still, 16 new plants have started operating since 2008 and another 16 are being built. That will contribute about 126 million tons of greenhouse gases a year while producing 17,000 megawatts of energy, enough to power 15.6 million homes.

DOE spokesperson John Grasser said the plants were a missed opportunity to restrict carbon emissions but that they would afford more opportunities as carbon-reduction technology grows (Matthew Brown, AP/San Francisco Chronicle, Aug. 17). - JP

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About Greenwire

Greenwire is written and produced by the staff of E&E Publishing, LLC. The one-stop source for those who need to stay on top of all of today's major energy and environmental action with on...
Pants on fire.

John Coequet
Cell. 202.669.7060
Direct. 202.675.7916

Begin forwarded message:

From: Lyndsay Moseley <Lyndsay.Moseley@lung.org>
Date: August 16, 2012 2:57:09 PM CDT
To: "clean-strategy@lists.usclimatennetwork.org" <clean-strategy@lists.usclimatennetwork.org>
Subject: [CLEAN-STRATEGY] Coal to Remain Viable, says EPA's McCarthy at COAL-GEN Keynote
Reply-To: Lyndsay Moseley <Lyndsay.Moseley@lung.org>

FYI

Coal to Remain Viable, says EPA's McCarthy at COAL-GEN Keynote

Louisville, Ky.
Aug 15, 2012
By Lindsay Morris
Associate Editor

"Coal will continue to provide more of America's electricity than any other fuel source, producing nearly 40 percent of generation in 2035," said Gina McCarthy during the keynote session of COAL-GEN in Louisville, Ky. on Aug. 15. McCarthy, assistant administrator for the Environmental Protection Agency’s (EPA’s) Office of Air and Radiation, remained positive about the future of coal as it transforms into a cleaner source of generation in order to comply with several proposed or finalized EPA regulations.

The other keynote speakers who spoke on the future of coal generation were John Voyles Jr., vice president of transmission and generation, Louisville Gas & Electric; Pierre Gauthier, president & CEO, Alstom U.S. and Canada; and Greg Graves, president & CEO, Burns & McDonnell Engineering Co.

The Electric Power Research Institute estimates that the coal-fired power industry will invest $275 billion in retrofits through 2035. The need for upgrades is driven by several EPA regulations, including the Mercury and Air Toxics Standard (MATS), the Cross State Air Pollution Rule (CSAPR) and the proposed New Source Performance Standard for greenhouse gases.

The potential greenhouse gas standard has been met with heated debate among power generators, who would have to install carbon capture and storage (CCS) technology in order to reach compliance. The EPA has received over 2 million comments from the industry as a result of the proposed rule-making, McCarthy said.

"While it's a significant economic lift, (the proposed standard) will provide investment for new technologies," McCarthy said. "CCS is technologically viable."

However, Gauthier said that technology to comply with the proposed carbon limit "is not waiting in the wings."
Great

Adam Kushner

----- Original Message -----
From: Adam Kushner
Sent: 04/05/2009 11:45 AM EDT
To: Bob Sussman; Beth Craig; Steve Page; Richard Ossias; Bill Harnett
Cc: Lisa Heinzerling
Subject: Re: David Bookbinder-- Cliffside Plant

Bob: (b) (5) DP, (b)(5) ACP

Adam

Adam Kushner
Director
Office of Civil Enforcement USEPA
202-564-7979

Sent by EPA Wireless E-Mail Services
Bob Sussman

----- Original Message -----
From: Bob Sussman
Sent: 04/03/2009 06:05 PM EDT
To: Beth Craig; Steve Page; Richard Ossias; Adam Kushner; Bill Harnett
Cc: Lisa Heinzerling
Subject: David Bookbinder-- Cliffside Plant

I had a brief conversation today with David Bookbinder of the Sierra Club, who was meeting with us on another matter (b) (5) DP

Are we engaged in looking at the Cliffside permits? Might we want to take a look at the MACT applicability analysis because it could set a precedent for mercury controls at other new plants?

Robert M. Sussman
Senior Policy Counsel to the Administrator
Office of the Administrator
US Environmental Protection Agency

I had a brief conversation today with David Bookbinder of the Sierra Club, who was meeting with us on another matter. He reminded me of our earlier discussions on coal plant permitting and specifically highlighted mercury MACT issues at the Duke Cliffside plant in NC. Apparently the company redid its applicability analysis to show that mercury emissions were below the major source threshold and the NC permitting agency has accepted this analysis. David believes the analysis is questionable technically.
Mr. Dee Freeman  
Secretary  
North Carolina Department of Environment and Natural Resources  
1601 Mail Service Center  
Raleigh, North Carolina 27699-1601  

Dear Secretary Freeman:

On March 19, 2009, the North Carolina Department of Air Quality (NCDAQ) issued Permit No. 0404-T29 and related technical background documents for the Duke Energy Carolinas (Duke) - Cliffside Steam Station. Included in these documents is a determination by NCDAQ that Unit 6 at Cliffside is an area source for Hazardous Air Pollutants (HAPs). While NCDAQ has included measures to strengthen the permit, the U.S. Environmental Protection Agency is concerned about the Unit 6 HAP potential to emit (PTE) analysis and permit conditions NCDAQ established to ensure continued HAP area source status for this unit.

To demonstrate that the source operates below the HAP applicability threshold of a major source, we recommend that the monitoring plan currently outlined by the State of North Carolina be modified to require continuous emission monitoring sufficient to verify compliance with the area source determination at all times. Specifically, we recommend that such monitoring include installation of a hydrogen chloride (HCl) continuous emission monitoring system (CEMS). While there are monitoring alternatives to an HCl CEMS, a HCl CEMS is expected to provide the most reliable assurance of compliance.

Our concern arises from questions and uncertainties associated with the unit’s operating assumptions. For example, the current analysis specifies that both the spray dry absorber and the flue gas desulfurization units (scrubber systems) have to achieve very high removal efficiency (99.913%) at 3209 parts per million (ppm) coal chlorine content for the Unit to stay below major source thresholds. This removal efficiency is sufficiently tight that a small deviation of the annual removal efficiency, such as might occur during periods of start-up, shutdown, or malfunction, would cause the unit’s emissions to exceed the major source threshold for HCl.

These technological considerations and the associated assumptions make it prudent to continuously measure HCl on Unit 6 to assure compliance with Unit 6’s area source status. I appreciate your continued work to improve and protect air quality in North Carolina. If you have any questions or wish to discuss this further, please contact me or Carol L. Kenker, Acting Director, Air, Pesticides and Toxics Management Division, at (404) 562-8975.

Sincerely,

[Signature]

A. Stanley Meiburg  
Acting Regional Administrator

cc: B. Keith Overcash, P.E., NCDAQ
Thanks Beth, yes, we should definitely have a follow-up discussion.

Robert M. Sussman
Senior Policy Counsel to the Administrator
Office of the Administrator
US Environmental Protection Agency

Beth Craig

Dear Bob,

Attached for your review is follow up information from our meeting with the Sierra Club on power plant permitting. We have attached background information on the process which has been used in the past to comment on permits. We also provided a short summary description on each of the permits.

Looking forward to having a discussion about this document and next steps. Thanks, Beth

[attachment "power plants march 23rd.doc" deleted by Bob Sussman/DC/USEPA/US]
Bob - I was delighted to hear EPA is going to take another look at the air toxics rule for dry cleaners. If you have some time this week or next, I’d like to get together to discuss another issue that could have broad effect on many environmental regulations.

As you may know, the Bush administration took the position that the 6-year statute of limitations for civil suits against the government bars statutory deadline suits. Statute of limitations arguments had been raised in environmental deadline cases before, but no previous administration adopted a blanket policy of raising them in all cases.

In the absence of guidance from the new administration, DOJ is continuing to push the statute of limitations argument in suits across the country. For obvious reasons, the argument makes it difficult for EPA and environmental groups to settle deadline cases and is considerably increasing the pressure on us to bring a large number of deadline cases over the next few months. It also creates a perverse incentive for delay at the agency.

The argument has been rejected by most of the courts that have heard it. However, it has been accepted by the 11th Circuit and in one decision by the D.C. district court. It has been briefed in other cases that may be near decision. These include the brick kilns deadline case in which I am representing Sierra Club.

I believe DOJ can (and must) drop the statute of limitations argument if EPA asks it to do so.

David Bookbinder, who also works on many cases and issues potentially affected by the statute of limitations argument is also available to meet. I am free most of this week and all of next.

Jim Pew
(The two cases accepting the statute of limitations argument are attached, along with a D.C. Circuit decision addressing the argument in dicta and a sample of the district court cases rejecting it.)
Dear Patricia,

Is it possible for you all to put together a short summary of the arguments that the Sierra Club made on why GHG are currently regulated under the CAA? Gina would like to get a copy. It is the Issue#3 section of the attached.

Thanks, Beth

--- Forwarded by Beth Craig/DC/USEPA on 08/05/2009 08:38 AM ----

From: Carol Rushin/R8/USEPA/US
To: Steve Tubin/R8/USEPA/US@EPA, Debrah Thomas/R8/USEPA/US@EPA, videtic.chadie@epa.gov, Robert Ward/RG/R8/USEPA/US@EPA, ornstein.peter@epa.gov
Cc: Beth Craig, gaydosh.mike@epa.gov
Date: 08/04/2009 08:41 AM
Subject: Fw: Clean Air Act Title V Petition - Big Stone
You give me a comb, and I will never part with it...

Wit Wald (who could probably build his own power plant), the key issue is to make the most compelling case possible that CCS is “adequately demonstrated.” I was sent a list of CCS projects by one of your colleagues yesterday, but what is needed is a table that lists the project, company that owns it, location, level of co2 capture, and most importantly – pet of completion/estimated start date. Links to the projects would be useful. It could be sent to reporters who want to dig deeper into the question of “is this technology real?” Since the strategy of opponents seem to be cast doubt on the technology, the more evidence that it is on its way, the stronger the case. There are some of these details starting on Page 19 of the draft rule, but it's not in a format that can easily be shared with a reporter. Anyway, my 2 cents based on what I am hearing from reporters other than Matt.

Keep up the great work! Dan W

Daniel J. Weiss
Senior Fellow and Director of Climate Strategy
Center for American Progress
Center for American Progress Action Fund
202.481.8123 O
202.389.8807 M
dweiss@americanprogress.org
dweiss@americaprogressaction.org
@DanJWeiss

From: Dan Weiss <dweiss@americanprogress.org>
To: Goffman, Joseph
Subject: RE: nice picture!

Cited in FN 31 and 33
NSPS Option X

- Set a single[1] uniform emission rate or heat rate standard for all Da sources
- Standard would be somewhere in the range of 1600 (with trading) to 2100 (less or no trading) lbs CO2
- Use 2100 lbs
  - Acc already
  - Abp these r
  - Th the improv fleet.
  - Unit
  - If all drop by
- BDT for
- argue that it
- All units therefore not many units w

- Many units could meet the standard through natural gas co-firing—query whether units would choose to do so and at which level—one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking natural gas co firing into account. Not all units can natural gas cofire.
- Standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.
- Could add a trading module for generation of credits within existing DA or within new and existing Da.
  - Credits would be generated by setting a baseline for all existing sources using their 2008-2010 actual emissions.
  - Sources with 2008-2010 baselines above the 10,000 heat rate could generate credits by emitting below 10,000 (including by shutting down) during the period between rule promulgation and the effective date of the standard (2020)
  - A second tranche of credit generating units could be included—for instance those units with heat rates between 8000 and 10,000. It’s not clear what the rationale would be for allowing those units to generate credits and not others. Modeling could help figure out if a second tranche is necessary or advisable.
- Remaining useful life safety valve: Instead of (or in addition to) trading, remaining useful life could be defined in terms of the impact of meeting the standard on a state (or RTO’s) average electricity price. If a state determined that the impact of a specific unit meeting the standard would result in an electricity price impact greater than x% (say 2%) then the state could determine that the source in question should not meet the standard.

Cited in FN 35, 36 and 37
NSPS Option X:

- Set a single\[1\] uniform emission rate or heat rate standard for all DA sources
- Standard would be somewhere in the range of 1600 (with trading) to 2100 (less or no trading) lbs CO2 per megawatt hour
- Use 2100 lbs CO2 per MW hour as straw proposal—roughly a heat rate of 10,000
  - According to CATF guesstimates about 38% of existing capacity and would already meet this standard.
  - About 28.5% of capacity are units with heat rates between 10,000-10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency
  - The total percentage of units that can meet the standard easily without improvements and units that are close to the standard is about 65% of the coal fired fleet.
  - Units above 10,500 heat rate would constitute about 34% of existing capacity.

- State equivalency: Draft model rule allowing states to determine equivalency with this standard looking at all DA units in their state.
- CCS—use demonstration provision to allow first 10 GW of CCS to meet an 1800 lbs CO2 per MW hour and to generate credit for all generation below that level.
Hammit, Jennifer

From: Michael Goo
Sent: Tuesday, August 27, 2013 3:43 PM
To: Kim, Robin
Subject: 5
Attachments: 111d Memo 5.30.doc

From: Michael Goo
Sent: Monday, August 19, 2013 2:18 PM
To: Michael Goo
Subject: Fw: Memo

----- Forwarded Message -----  
From: John Coeuyt <John.Coeuyt@sierradub.org>
To: michael Goo
Sent: Tuesday, May 31, 2011 2:33 PM
Subject: Memo

Michael:

First, you might want to change your personal email address, now that you have new job and all.

Attached is a memo I didn’t want to send in public.
Standards of Performance for Existing Sources

Issue: Must a standard of performance under Clean Air Act section 111(d) be achievable by every source in a given category?

Analysis:

The definition of a “standard of performance” in section 111(a)(1) requires that the standard be “achievable” based on the best “demonstrated” “systems of emission reduction.” It provides:

a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

This definition applies to standards for both new and existing sources. See 111(b)(1)(B), 111(d)(1). The statute does not define “achievable,” nor does it state that every existing source in the category must be able to achieve the standard. The term “achievable” is ambiguous and EPA therefore has discretion to adopt its own reasonable interpretation.

The case law makes it clear that when establishing performance standards under section 111 for a given source category, EPA need not set standards that are achievable by every existing source in that category. Performance standards can be technology-forcing:

Recognizing that the Clean Air Act is a technology-forcing statute, we believe EPA does have authority to hold the industry to a standard of improved design and operational advances, so long as there is substantial evidence that such improvements are feasible and will produce the improved performance necessary to meet the standard.

Sierra Club v Costle, 667 F.2d 298, 364 (D.C. Cir. 1981) (footnote omitted). In fact, for new sources, the D.C. Circuit has held that the standard need not be achievable by any existing source. It can go beyond the current state of the art as long as it is a reasonable projection of what will be achievable based on existing technology. Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375, 391 (D.C. Cir. 1973). The court held:

We begin by rejecting the suggestion of the cement manufacturers that the Act's requirement that emission limitations be "adequately demonstrated" necessarily implies that any cement plant now in existence
be able to meet the proposed standards. Section 111 looks toward what may fairly be projected for the regulated future, rather than the state of the art at present, since it is addressed to standards for new plants-old stationary source pollution being controlled through other regulatory authority.

Id. The court’s reasoning distinguishes new and old sources, relying on section 111’s focus on new sources for its conclusion that existing sources do not necessarily need to be able to meet the standard.

For existing sources, unlike new sources, it obviously would not be a reasonable interpretation of the statute for EPA to set a standard that no existing plant can achieve. But EPA does have discretion to set a standard under 111(d) that (1) no existing plant is currently achieving, and (2) not every existing plant is capable of achieving. That discretion arises from the ambiguity of the “standard of performance” definition and the language of section 111(d).

Section 111(d) contemplates that the states will implement performance standards for existing sources, and that “[r]egulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source . . . . to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.” The statute does not define “remaining useful life,” so EPA has discretion to adopt a reasonable definition. That definition need not be based solely on age; it can also consider factors such as efficiency, capacity factor, investment in pollution controls, etc.

By allowing consideration of the remaining useful life of the existing source, the statute anticipates that some sources will not ultimately meet the standard before they reach the end of their remaining useful life and shut down. EPA has already interpreted 111(d) to authorize states to establish compliance schedules for sources to achieve the standard. 40 CFR 60.24. If states are to phase in compliance for particular sources on a schedule that takes into consideration their remaining useful life “among other factors,” it is a simple matter — and perfectly acceptable under the statute — to allow plants nearing the end of their remaining useful life to operate without achieving the standard and then require them to shut down at the end of that remaining useful life. EPA has already acknowledged this concept in applying the “remaining useful life” provision in the regional haze context. See 40 CFR pt. 51, App. Y, IV.D.STEP 4.k.2(2) (if decision by the facility to shut down affects the BART determination “this date should be assured by a federal or State enforceable restriction prior to the date of operation”); see also 42 U.S.C. § 7491(g)(2) (statutory BART factors include “remaining useful life of the source”). EPA can therefore establish a performance standard for existing plants that is not achievable by any plant nearing the end of its “remaining useful life” as defined by EPA.