

Monday, January 27, 2020

Notes by Ed Merta, City of Albuquerque

Attendance:

Jay Baker (UT), Curt Taipale, Weston Carlross (CO), Philip Gent (WA), Gary Huitsing (WA), Steven McNeese, Sig Jaunarajs (NV), Aislinn Johns (ID), Mark Jones & Kerwin Singleton (NM), David Stroh, Rhannon Thorton (ND) Robb Leteff (WY), Ed Merta (Abq), Tom Moore (WRAP), Rhonda Payne (MT), Tina Suarez-Murias (CA), Mary Uhl (WESTAR), D Pei Wu, Michael Orman, Phil Allen (OR), Aaron Worstell (EPA 8),

Action Items that resulted from the call

- For the February subcommittee call, Curt will put on the agenda a discussion of anticipated dates by which each state expects to have a decision on control measures that WRAP will model in the 2028 control scenario.
- Curt will send out an invitation to hold the next subcommittee call for week of Monday, February 17.
- Tina will send text of federal consent decrees on cement plants to Weston from Colorado and Ed from Albuquerque.

AGENDA ITEMS

1. Roll call

See above.

2. Volunteer for note taking

Ed Merta

3. Approve meeting notes from last call

Curt will send these out, hasn't done it as of today's call.

4. State Q/d threshold used in 4-Factor work

Curt asks if anyone has follow up questions.

Tina: for PM, has anybody come up with a distance threshold beyond which PM drops out, deposits, doesn't have impact? This has come up for California.

Curt: with PSD sources, screening distance is 100 km, he thinks -- this is from memory, hasn't checked it. Maybe this could be a surrogate for PM impact.

Aislinn ID: Arizona may have done some work on this, might be misremembering.

Tom: Arizona has selected some sources for PM four factor but Tom doesn't know what their criteria are.

Tina: thanks, I'll check with Ryan or Elias.

There was no further discussion.

5. Follow-up discussion on BART/RP Costs & Controls Workbook from Round 1 WRAP RH SIPS

Curt: AZ has sent out a spreadsheet displaying BART and Reasonable Progress cost thresholds and control measures decisions from first round of Regional Haze planning. Tom says this has been posted on RHPWG website under Control Measures subcommittee. Folks can look through this to compare work of other states, how it might play into your analysis for this round.

There was no further discussion on this topic.

6. Follow-up discussion on EGU retirements and accounting for useful life in the four factor analysis

Curt: EGUs will be big for Colorado. Key = do they have federally enforceable retirement dates that can be factored into cost analysis.

There was no further discussion on this topic.

7. Update on each state's four factor work

Albuquerque. Has received draft four factor from the only source in county asked to submit one. Now going over the analysis in cooperation with a contractor. On track to finish the analysis and decide by early to mid-March on control measures to be modeled.

Arizona. Not on call.

California. Talking with districts to identify which facilities have RACT/BACT/LAER in place, will screen those out. We have nine airports on our list. Landing/takeoff for NOx appear to be bulk of emissions. Remaining = air/ground support equipment, subject to a state wide regulation. Looking at what the additional controls might be. Talking with EPA about how to do analysis for area source categories.

Curt to Tina: airports looked at in CO too, e.g. engines, traffic going to airport, a lot of it is non road equipment not easily regulated.

Colorado. Curt reports Colorado looking at 20 sources, variety of EGUs, cement plants, others. Struggling with one source close to a Class I area, intermittent operations. Have gotten most analyses back that we requested. FLMs want SO2 at EGUs looked at, look at more SO2 controls beyond what's there -- can existing controls be tightened or run more efficiently? CO contacting

sources for more cost info on this. A lot of Colorado SO₂ controls involve lime spray dryers, can't achieve same control efficiencies as wet scrubbers. Colorado requesting more info from EGUs on this. This will delay our SO₂ analysis a bit. Hope to have a cursory review done in next month or so, then internal discussions on what to do. Might be a while before final determinations.

Weston from CO has question to group. In regard to cement plants: in his review, haven't found almost any facility that have successfully used SCRs. SNCR seems to be best you can do. Has anyone run across SCR being reasonable?

Tina: she has seen reference to three cement plants under consent decrees from EPA. SNCR was the control decided upon. One plant using shredded tires as fuel source, works well to bring NO_x levels down. But the fuel mix can't sustain the firing rate needed for higher production rates in certain years.

ACTION ITEM: Tina will send text of the consent decrees to Weston and Ed from Albuquerque.

Rhonda: Had cement plant near Helena that considered SCR, eliminated it as an option for this round due to lack of use around US, might be looked at more in third round.

Phil: our cement plant uses SNCR and tire derived fuel for NO_x.

Curt: EPA did national enforcement action about a decade ago for all cement plants in country. On facility subject to consent decree resulted in SNCR.

Idaho. Identified nine facilities. Three owned by same company, sugar beat processing. Have received info for all facilities except those three, expected info in next two weeks or so. Have started communicating with other Region 10 states and EPA region 10 contact, who has been really helpful. It's looking like Idaho might need to request more information from their facilities. Recommends that everyone talk to their EPA Region about info that they will need.

Montana. 17 sources, received 16 by Sept. 30, last report received mid-November. Evaluating them, holding conversations with facilities. Haven't made decisions on controls yet, "deep in the throes of review right now."

Nevada. Steven: Have received four factor reports from majority of the eight sources asked, have begun prelim review, waiting for two more to turn in their reports, expected by end of this week, will work on finalizing reports over next month.

Additional Nevada info from Sig. A big obstacle now is largest source, an EGU, was slated in IRP process to retire within second planning period, now that's not the case it turns out. Probably will be operated at a diminished capacity/emissions, but will still be in service. Not sure where they want to go with this plan, in negotiations with them. Larger context = EPA's ACE rule, Regional Haze Rule, trends in fuel cost, all of this plays in, I don't know where this plays out. Source seems to be looking for clarity on future regulatory environment, what direction of state will be. Would be interesting to hear from other states working with EGU sources where their future isn't quiet known.

Curt: coal fired units may have controls on, trying to do cost recovery, face competitive pressures regarding price of coal, renewables now less expensive than running coal units, all of this complicates picture on when to retire. Keeping a legacy plant running is becoming a big challenge.

New Mexico. Uncertainty with one of our EGUs, continuing dialogue to figure out best way to proceed. Tri-State announced a closure, on top of San Juan, working on getting documentation, probably won't be in SIP. Pursuing additional inquiries on earlier follow up requests for information on just about all sources, continuing internal discussion with focus on additional oil and gas controls. Working on understanding format for future control scenario for WRAP. We've done state to state consultations re: Colorado and Arizona. Will soon do this with Texas.

Curt: that reminds me, Colorado has been doing some consultation with CENSARA.

North Dakota. We've sent all requests out to facilities, we've had back and forth with all of them, most focus is EGUs. We're reviewing the four factor reports we received, had follow up discussions. Additional modeling will help North Dakota decide where to go on oil and gas. Holding a lot of discussions with EPA, Region 8, make sure we're moving in right direction.

Oregon. D Pei Wu - Four factor request letters went out in early and late December, now we're in discussion with permit writers and facilities on follow up work. We've been in state to state consultations. Haven't heard back from some facilities that received four factor request letters, will follow up. FLM consultations scheduled.

Utah. Been doing state to state consultations. All sources notified, number was 10 at first, now eight, due to closures. One power plant to close by 2025, will get paperwork on that rather than do a four factor. One other source has installed significant controls since 2014 NEI. Actually shut down part of generating facility, so we're not requiring a four factor from them, they have done everything that would be required anyway, and their emissions have dropped below Q/d due to new controls. Expect other reports to roll in this week and next week.

Washington. 18 sources, coal, gas, cement, aluminum, refineries, pulp paper. Coal plant closing. Gas plant is putting in SNCR, will take credit for that. Working with cement plant, not seeing anything from them. Working with other sources to get more info, deal with complexity of specific sources. Beginning to get some sense of which controls economically feasible at some sources. Moving through sources as expeditiously as possible. Shout out to Montana - provided some stuff on their cement plant, we'll be sending some of our stuff to them. Looking at setting up a long-term approach into the future so we don't have to look at them in next planning period, can look at other categories, the ones from this planning period will already have changes for further progress locked in. Key is to make sure to get achievable controls locked in for long term. Mobile sources becoming more and more of a problem, our authority is very limited on that.

Wyoming. most four factor reports should be in by end of month, some requested extensions but we want at least any information to indicate any change between 2014 NEI and now. Once we get all reports in we'll start analyzing those.

8. Other topics

Tom: on February call of this subcommittee, would be really helpful to have pretty firm date from states on their potential additional controls. No one has to finish their four factors, this is just a decision on what states want WRAP to model. A "what if" model run.

Curt: in previous round, a whole bunch of controls happened after initial what if run. At some point, we have to plant flag on hill, let's go with this. Will never be perfect. At some point the inputs of the modeling might change.

Tom: the control measures modeling is a bounding exercise. You may put in controls after the modeling and the visibility goals may not change much at all.

ACTION ITEM: Curt says that this topic will be agenda item on next call.

Sig: many states have been grappling with what sort of dollar per ton threshold to use in control decisions. Are states still thinking about this?

Washington to Sig: we're trying to set up system that says here's a range, starting with minimum dollar value up to a higher dollar value, and in this range is where we'll look at control measures being possibly feasible. Not a bright line. Tie that to inflationary index to carry forward. We can share results of our approach with other states after some internal decisions are made. Some of the discussion of cost thresholds in the current round has mentioned a long standing potential feasibility threshold of \$5,000, or other numbers, but some of the values discussed were from around 1990, that's why we want to account for inflation. Our sources have had input on this, regarding inflation, will use the results of our work in our permit work.

Curt: CO did oil and gas rulemaking in December, control costs were from \$1,000 per ton all the way to \$20,000 per ton, our commission approved all of these. Every state will have different control costs, it's somewhat driven by economy and situation in your states, not hard and fast number. Historically Colorado has used around \$5,000, new commission willing to go with higher costs.

Tina. Reassuring to hear from Washington and Colorado on this. California is a big state, different types of sources in different parts of state, we have no single threshold. Populous south coast has high threshold, very expensive controls, but in isolated areas of north, much lower threshold. Considerable differences from region to region, likely tens of thousands of dollars.

ACTON ITEM: Curt will send out an invitation to hold the next subcommittee call the week of Monday, February 17.