

New RCSA section 22a-174-22 Subcommittee
Definitions, Applicability, Tune ups, Record keeping
4/29/15
Summary of Discussion

Before the meeting Bob Silvestri (PSEG) shared diluent cap description and definition. Regarding electricity for sale, no. 6 oil usage during startup can generate MW before coal usage. PSEG is OK with including periods of startup for compliance purposes as long as it has the diluent cap (at least for Phase I).

Wendy Jacobs (DEEP) runs through the presentation. (Available on the RACT web page) Caution was provided about averaging as a compliance option, especially during Phase 2 (averaging may not be a compliance option during Phase 2). Also, caution was provided about proposed regulation language not being vetted by enforcement yet.

Discussion after the presentation

Compliance options

Bob Silvestri: Regarding the compliance option for converting the fuel used from residual fuel oil to distillate fuel oil, where did the 50% heat input criteria come from? Can it be less? Wendy: That's in the existing Section 22. We did not come up with that. We can look at that.

Danita Park: Will there be TAOs in Phase 1?

Wendy: Yes, the TAO has the specifics of trading.

Danita: When you talk about caution with averaging – do you really mean no averaging in Phase 2?

Wendy: Maybe. We don't see many sources able to average in Phase 2. It's not simple. 30 days doesn't give a lot of options.

Danita: What does it mean that units have to operate in the averaging period?

Wendy: It means that the units averaged must operate during the 24-hour or 30-day period, the period used for averaging.

Jim Romanski (Yale): The presentation mentioned the "unit designed to burn gas 1 subcategory" under 40 CFR 63, Subpart DDDDD, but I didn't see that anywhere. Wendy: It's a compliance option – (g)(3)(F).

Steve Eitelman (UTC): Would we need a permit/order for all of the compliance options? Merrily Gere

(DEEP): EPA said where the reduction is predictable (such as switching to natural gas?) a (SIP?) order may not be needed. We need to talk with enforcement about this too.

DERC Trading as compliance option

Bob Silvestri: How do we have a bank of DERCs going forward given that the Trading Agreements and Orders expire in 2017? Merrily: We are aware of that issue and are looking into it.

Peter Egan (MIRA): Our trading agreement and order expires May 2017. If we want to operate in Phase 1 we need to notify DEEP in a request no later than September 2017 according to subsection (g)(1). Our trading agreement and order would have to be extended. Can we notify DEEP prior to the regulation being finalized? DEEP: The regulation needs to be finalized, but enforcement is aware of the need for extension of trading agreements and orders and is talking about it.

Definitions

Startup. Jack Dunne (Pfizer): Regarding the definition of startup, the term “for any other purpose” seems unnecessary. I suggest removing that. Also, the term “whichever is earlier” in the sentence with “four hours” may be unnecessary. Someone mentions the “four hour” language is confusing. Someone also asks about the last sentence in subparagraph (A) regarding “fraction of an hour”. Does not apply? Sally Kruse (PSEG): For simple cycle turbines, you don’t get good readings from CEMS out of 4 hours; some is calibration. Wendy: Simple cycle turbines will be removed from the definition. Jim: Regarding shutdown ending. It’s not defined as fuel turned off. Everything is hooked up to steam delivery and can take a 5-10 minute time period. Bob Silvestri: Coal is Bridgeport Harbor 3’s lowest emitting fuel. They must be very cognizant of shutdown. Jack: Get rid of subparagraph (A) or exclude certain types of firing from being startup. Jim: If you take the turbines out of the definition, does the permit control what is startup? Wendy: Yes, we could add a subparagraph (C) and keep the turbines in but point to permit. Jack: The problem is the “whichever is earlier” clause. Steve E: What about the fraction of an hour equally a full hour in the startup definition. We haven’t done that before. Bob Silvestri: We don’t want the fraction of an hour in (A). Jim R.: I like the fraction of an hour. Bob and I will talk about this later. Danita: We discovered that transient time period during startup gave bad CEMS readings due to oxygen levels. The Title V permit addresses this. NOx is a part 75 parameter which defines a valid operating hour. And calibration occurs within 2 hours of startup so that another complication.

Shutdown. Jim: I have shutdown concerns. Shutdown in permits isn’t defined by when fuel turns off. Everything is linked in steam delivery system so something has to come on when another unit’s shuts down. We could be shutting down before the fuel is stopped and everything is off for those minutes. I’ll come up with suggested language.

Wendy: We’ll take the definitions out of they cause trouble for you. We were trying to be consistent with MATS or the Boiler MACT.

Bob S: We have an issue with Unit 3. When we shut it has to be 11PM or past midnight. It really matters when we shut down. Sally: It’s the same in New Haven.

Jim R: Regarding the definition of boiler serving EGU – that is the only place cogeneration facility is mentioned. Do we need a definition of cogeneration facility? Merrily mentioned using the dictionary definition for certain terms. Jack: The definition of combined cycle combustion turbine sounds like cogeneration facility too. Someone: Units that can fire without the turbine – would they be subject to the ICI boiler limit?

Bob T: Regarding the definition for process heaters – is that creating a separate category? Wendy: I think process heater is referenced in the startup/shutdown definitions.

Jim R: In the definition of “ozone forecast” you might not want to refer to the Department’s website if that’s not the mechanism to be used in the future. Maybe you could add “or otherwise on line”.

Steve E: Regarding the proposed definition of temporary unit and subparagraph (D) – We may be doing a similar job in a different location, and that could pose difficulties.

Jim R: Regarding the definition of daily block average, shouldn’t it be off of hourly blocks? Sally K: Part 75 rolls up to hour blocks. If you miss by a minute it would invalidate the hour. Jim R: Part 60 is really

for accounting and Part 75 is for compliance. Bob S: What about use of the term “valid hour”. Sally: If it’s an invalid hour, missing data is substituted. Data availability is extremely difficult for short duration run units. We have to think about compliance. EPA looks at every word. Part 75 can invalidate large amounts of data. Jim R: Where did daily block average and out of control period definitions come from? Merrily: I can’t recall, but I believe it was some federal document. Jack D: If there are 2 separate ways of doing it, it might help to reference back to the way those are described in Parts 60 or 75.

Jim: Do we need a definition of “cogeneration facility”? Wendy: We don’t think so. Jaimeson: Would a cogen be subject if the duct burner fires without the turbine?

Applicability

Corine: There is no numerical threshold for either Boilers serving EGUs or ICI boilers in the applicability? Was that intentional? We need one or recordkeeping for startup and shutdown is too onerous. Jack: Also, same issue for EGUs and ICI boilers have no minimum threshold. Is that intentional?

Tanja Ashlin (UTC): Asks about air heaters and limit. Wendy: In the past, some have said that the 180 ppmvd limit applies because the air heaters heat “material” (air). Some think that the 700 ppmvd limit would apply.

Bob T: What about a source that was never above the major source threshold? Wendy: We’re removing those (137/274 lb/day threshold) and moving them to Section 22f for short term emitters.

Bob S: I understand that the dates in the proposed regulation are consistent with the Forward Capacity Auction so they don’t line up exactly with the ozone season dates. How do you effectively average over the ozone season during the first year of the program? Merrily: We could have some language addressing the first year issue.

Jim R: Yale could be a source that has a GPLPE but also a Title V permit because of CO₂. Merrily: Wouldn’t the major stationary source of NO_x language address that in the applicability?

Exemptions

Jack: The proposed (c)(3) seems different from the existing (c)(2). It seems less clear. This is to provide flexibility for reciprocating engines during maintenance/repair. Sometimes we need to power the facility for a few hours while we wipe down a transformer. Steve E also mentions something about routine maintenance where they need to shut off equipment and run the emergency generator. Tanja Ashlin (UTC): We can’t move a non-road engine up to the 3rd or 4th floors. Jack: New (c)(7)(C) seems to override the maintenance and repair exemption because it seems that you need to be categorized as one thing or another. This is less clear.

Steve Horn (Dominion): It might be more helpful to include subsection references rather than titles of the subsections (descriptive words). That is clearer.

Case-by-case RACT

Danita Park (NRG): When would we have certainty about an alternative RACT submission? There is no defined deadline for case-by-case RACT. Timing is a concern, although it's easier for Phase 2. The bank of DERCS is a concern, so may impact decision to seek alternative RACT.

Bob Tyler (Woodard & Curran): Regarding case-by-case RACT, is it true that you can't use proposed (h)(1) unless we review all compliance options in proposed subsection (g)? Merrily: Yes.

Record keeping

Corine Hellerman (Sikorsky): Regarding proposed subsection (j)(2)(l), there is no size cutoff for ICI boilers in the applicability. Do you really want all of those startup/shutdown records for the small ICI boilers?

Bob S: Regarding recordation of the quantity and heat input of fuel for each hour of startup (p. 8, (H) and (I)), if that is not included in compliance determination, why do they need to record that? Wendy: I think that is from MATS/Boiler MACT. Tanja: Only apply that to CEMS sources.

Jim R: It's an enormously daunting task to keep track of the costs of all parts/labor, etc. required in subsection (j)(2). There are many valves, sensors, etc. going in at different times. Tanja: For subsection (j)(2)(G), doing that for the annual tune up is OK, but not if you're just adjusting the air.

Tanja: The word "all" in (j)(2)(D)(iv) regarding record keeping of all CEMS charts, electronically stored data, and printed records produced by the CEMS worries me.

Jack D: Proposed (j)(2)(D)(ii) should say "record of maintenance performed" instead of "record of maintenance procedures".

Steve H: Some record keeping is difficult to do if you don't have CEMS.

Jim R: What if startup/shutdown recordkeeping only for sources that need it for compliance purposes?

JimR: Don't just refer to the website for the ozone forecast in case the method changes in the future (twitter or something).

Reporting

Someone (Jack?): The CEMS report requirements list much but maybe not everything. It's more clear to say quarterly monitoring as required by the emissions monitoring group. Ex: Calibrations, down times, and others may not be in there.

Miscellaneous topics

Corine: If you don't have CEMs, would you have to do a 24 hour stack test? Merrily and Wendy: It would be 3 1-hour tests or whatever specified in an applicable NSPS – similar language to that in the existing Section 22.

Corine: If the unit has a duct burner, would that have to meet the ICI boiler limit? Wendy: We would use similar language to that in NY's RACT rule: For an emissions unit associated with a duct burner, the emission limit applies to the combination of the turbine and duct burner when both are operating and the turbine alone when not duct-firing.

Someone mentions something about GG.

Bob S: What about the proposed language about averaging in the same nonattainment area? Merrily: We are talking about that. The latest trading orders allowed different nonattainment areas but we're not sure where EPA stands on that now.

Steve H: Will we see another draft before the next meeting? Merrily: If not then, at some point soon after.

After the meeting

Tanja: For schedule modification, would the support equipment (i.e., air heaters) that complies also be exempt? There was discussion about this in the past. The CO2 correction (12%) for 180 ppmvd limit makes the results odd. Also, schedule modification is currently done through an order, but if it's moved to the exemption subsection, would an order still be required?

Steve H: For ICI boilers, a 3 MMBtu/hr unit would not have emissions limitations, but would have to do tune ups. There could be 50 startup/shutdowns during the day.

Since proposed (c)(3) language does not list the subsections, but rather descriptive words, would proposed (d)(12) requirement (no testing/maintenance on bad ozone days) apply? Wendy: No.

Steve: Do the exemptions expire in 2030 as well? Wendy: No.