

Pennsylvania Department of Environmental Protection
AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING
 Minutes
 12/10/2020

Air Quality Technical Advisory Committee (AQTAC) Members Present (joined via Webex or on the phone)

Rob Altenburg	<input checked="" type="checkbox"/>	Kimberly Coy	<input checked="" type="checkbox"/>	Joseph Duckett	<input checked="" type="checkbox"/>	Michael Fiorentino	<input checked="" type="checkbox"/>
Josie Gaskey	<input checked="" type="checkbox"/>	Jayne Graham	<input checked="" type="checkbox"/>	Joseph Guzek*	<input checked="" type="checkbox"/>	Michelle Homan	<input checked="" type="checkbox"/>
Judy Katz	<input checked="" type="checkbox"/>	Charles McPhedran	<input checked="" type="checkbox"/>	Gary Merritt	<input checked="" type="checkbox"/>	Patrick O'Neill	<input checked="" type="checkbox"/>
Richard J. Shaffer	<input checked="" type="checkbox"/>	John Shimshock	<input checked="" type="checkbox"/>	John Slade	<input checked="" type="checkbox"/>	Kevin Stewart	<input checked="" type="checkbox"/>
John Tissue	<input checked="" type="checkbox"/>	John Walliser	<input checked="" type="checkbox"/>	Michael Winek	<input checked="" type="checkbox"/>		

*Not at roll call, but joined later.

Department Staff Present (joined the Webex or on the phone):

Mark Hammond	Kirit Dalal	John Krueger
Darek Jagiela	Deborah Wehr	Chris Trostle
Randy Bordner	Viren Trivedi	Bob Bonner
Bryan Oshinski	Krishnan Ramamurthy	Jennie Demjanick
James Rebarchak	Valerie Shaffer	Gregory Lenahan
Jesse Walker		

Others Present (Individuals who joined the Webex or on the phone):

Joseph Kusnher, Key-Con	Kevin Panzino, Cheswick	Dan Hooper, EPA HQ
Alison Simcox, EPA Reg 1	Brian Fisher, EPA	David Lifland, EPA
Charles Haney, EMAP	Norm Possiel, EPA	Abby Foster, PCIC
Mar Huncik	Bill Kesack, CMI	David Mackintosh, EPA
Dennis Simmers, Colver	Keith Schmidt, Genon	Elana Pyfrom, Univ Penn
Heather Empfield,	Josephine Martin	Domenic Tedesco, Penn Energy
Lauren Illig, Conemaugh	Miriam Baril, Boeing	Andrew Ritter, Range Resources
Nate Rozic, Key-Con	Nick Leone, All4	Robert Routh, Clean Air Council
Thomas Roberts, Ebensburg	Travis Gery	Zachary Lehman, Key-Con
Lee Ann Briggs, EMAP	Raffi Rodrigo	Kevin Sunday, PA Chamber
Mark Beston, ERM		

CALL TO ORDER

Patrick O'Neill, AQTAC Chair, called the 12/10/2020 meeting to order at 9:15 AM through Webex.

ADMINISTRATIVE ITEMS

Patrick O'Neill made a roll call for the AQTAC committee members.

October 15, 2020 DRAFT Meeting Minutes: Joe Duckett expressed that he could not access the 2nd bulleted link under the follow up item concerning the Sierra Club. **Follow-up:** Deb Wehr will look into if it is a broken link and address as appropriate. *(Address in the draft minutes was correct. The October minutes were posted as final on 12-15-2020 on the AQTAC website with new hyperlinks to the materials.)*

Patrick O'Neill reminded members of the DEP request from the last meeting about more presentations on Generation Dispatch from other members/industries or other topics.

Approval of Minutes

The minutes from the 10/15/2020, meeting were approved with one abstention.

Kevin Stewart made the motion and
Joseph Duckett seconded the motion.

General Announcements

Mark Hammond, Air Director, made a brief comment relating that dispatch is an important concept to being able to understand and advise on electric generation issues as they affect air pollution. We still need speakers particularly from the renewable energy sector, and a reminder that this can be a member presentation or an outside speaker. He also introduced the Zero Emission Vehicle Memorandum of Understanding explaining why it is important to Pennsylvania.

PRESENTATION

Chris Trostle made a presentation on the Medium and Heavy Duty Zero Emission Vehicle Memorandum of Understanding.

Discussion

PA has already signed onto this MOU. The committee posed a question about the number of western states adjacent to PA who have not signed on and how this will affect long range fleet vehicles. Chris Trostle mentioned that FedEx and Amazon are committed to 100% electric vehicles by 2030. While it is a concern for long-range fleets, not all fleets are long haul. It is anticipated that the bulk of the first vehicles to change over will be the smaller (pick-up trucks and class 3 delivery trucks) that travel more local routes.

The committee discussed the range of the heavy-duty vehicles and how far they can go on a charge. The committee also discussed how cold temperatures affect the vehicles' battery range. The committee asked about battery disposal issues which Chris did not have any information.

The committee asked if DEP has done any calculations on increased MW capacity necessary for these future needs if of these medium- and heavy-duty vehicles to go electric? **Follow-up:** Chris said the energy office had done some research and he'll get that information.

“DEP’s understanding, based on PUC analysis, is that existing electric generation and transmission capacity is sufficient to charge electric vehicles as long as the vast majority of charging occurs overnight, as expected, and the charging does not occur during peak demand.”)

The committee also asked about power-torque issues necessary to traverse the mountainous, rural and remote routes, specifically in Colorado and in Pennsylvania. Chris Trostle replied that from what he has heard engine manufacturers design diesel engines for the specific purpose they’re intended. It is not known for certain how electric trucks will perform confronted with the combination of steep grades, cold temperatures, and inclement weather and what impact that will have on logistics. The topic of urban electric busses came up, in particular implementation of the Philadelphia SEPTA routes. Patrick O’Neill said he would look into that.

PRESENTATION

John Shimshock, Joseph Kushner and Kevin Panzino gave a presentation on How Generation Dispatch Affects Coal Fired Electric Generating Units (EGUs).

Discussion

The Committee asked about minimum temperature for SCR operation and the two drawbacks, ammonia slip and fouling of preheaters.

The presenters were asked to discuss how a company decides what to bid into the capacity market and how being a capacity unit affects participating in the day ahead market. The response was that usually companies offer the unit to the capacity market as a “break even” price which takes into account labor, salaries, insurance, revenue, etc. and is done 3 years out. Different companies have different strategies which could mean that others bid in at lower than market prices.

The presenters further explained that the capacity market affects the day ahead market because it is a contractual commitment. If the unit is picked up or “clears” the capacity market, it is contractually required without exception to offer the unit in every single day (except for unit unavailability resulting from equipment failure or damage). There is a price offer and a cost offer which has to be put in every day. The cost offer is audited by the independent market monitor. The price offer is allowed to account for profit, but actual costs are also required.

The committee asked about Ohio’s increased capacity (permitted and newly installed natural gas electric generating stations shown on slide 23) and the impacts of RGGI on the costs to the PA units. Mr. Panzino indicated that it is anticipated that the Ohio and WV units are going to be \$3-\$3.50/MW lower than the PA units. Mr. Panzino stated that PJM has a taskforce specifically looking at this.

There was a question from the audience about whether the price contract is by unit or by facility because there are times where two units operate at low load at the same facility, but if the facility could operate just one unit at higher load then the SCR might operate. Mr. Panzino

responded that the price contract is by unit, not by facility. The number of units is dictated by PJM and the market monitor rules and cannot operate in that way. It was discussed that these large units cannot just be turned on and turned off like flipping a switch, it takes hours. Therefore, it is a reliability concern for PJM to not have enough units online. Mr. Kushner discussed that the Keystone and Conemaugh units are considered critical infrastructure protection plants for cyber security and reliability to respond to grid upsets within 15 minutes.

PRESENTATION

Dan Hooper, EPA HQ, CAMD section made a presentation on the Revised Cross State Air Pollution Rule (CSAPR) Update.

Discussion

The Committee asked if facilities that have Group 2 allowance have to decide how many to convert to group 3, or does EPA dictate? David Lifland responded that it is up to the facility. He explained that Group 2 allowances in certain accounts will be converted to Group 3 allowances on a certain date. If a company doesn't want the allowances converted, they need to move the allowances to a different account. Facility accounts for the 10 specified states remaining in the Group 2 program will not have allowances converted. General accounts, facility accounts for Group 3 sources will be subject to the default conversion. There are also options for keeping Group 2 allowances, namely a broker option, and a temporary holding account.

A second question was asked if EPA considered transportation pollution changes (related to rulemakings) in those modified inventories when looking at the CSPAR changes. Brian Fisher responded that in general, yes, there is a forward-looking element for known changes, programs and policies that are slated to go into place in certain years, definitely for the EGU side. He indicated that more information on specific inventories are available on the proposed rule website given in the presentation.

The Committee asked what was the basis for determining if a unit would run in 2021. The IPM model run of October 5, 2020 shows some of the units not getting allowances are going to be active in 2020 and 2021. Brian Fisher responded that the trading program has state level emission limits. He said the methodology is described in the preamble and the Ozone Transport Policy TSD. Mr. Fisher explained that EPA started with 2019 actual reported data and adjusted for units that had announced retirement that had been approved or new builds that were scheduled to come on-line or retrofit. Mr. Fisher responded to the second part of the question by saying if there is a unit you think is going to be covered and operating in a future year that is not in the inventory, it is something that you should provide comment on to EPA. It was clarified that the list is units that started operation before January 1, 2019, and that units that started after January 1, 2019, would still get allocations, they are just not in that list.

The Committee also asked about credits under the update for a facility that operated through 2019 but then shut down in 2019. David Lifland answered for the existing programs that are continuing, if they are in program, but not operating for the first 2 years of program, then they

can get allowances for up to 5 years. If they were not operating at the start of the program, then they would not be operating units and not get any allowances under the proposal. However, for the new program, units that stopped operating before the start of the new program don't get considered as operating units and would not get any allowances, as proposed. He encouraged specific comments to be submitted to EPA through the docket.

The Committee asked for greater explanation on slide 10 on the general terms of how the baselines and budgets change over time. EPA responded that the baseline is starting with 2019 state level data and reflects any known changes (new units, retirements, etc.). The 2021 budgets reflect things that mitigation technologies that were deemed possible by 2021. Combustion control upgrades were not considered to be able to happen by 2021, are therefore accounted for in 2022.

In response to why sometimes the budget and baseline for certain states are close and others far apart, EPA explained it has to do with the amount of control planned and operating and if there was a reduction potential for the unit. EPA directed the Committee to look at Appendix 8 of the Ozone Transport Policy TSD available on the website reference in the presentation.

PRESENTATION

Kirit Dalal gave an update on DEP Rulemakings and State Implementation Plan Revisions. He mentioned one item that was not included in the document. The 1997 8-Hour Ozone National Ambient Air Quality Standard Second Maintenance Plan for the Youngstown-Warren-Sharon Area was published as a proposed approval by EPA on October 30, 2020. It can be found in the Federal Register at 85 FR 68826.

Discussion

The Committee asked about the timeline for the Fees Package. Mark Hammond responded that the House no longer has the ability to vote on the regulation due to timing, so it is with the Attorney General for final approval. DEP expected to publish the rulemaking in mid-January 2021. The application fees would be effective upon publication the *PA Bulletin*. The annual maintenance fees for Title V, synthetic minor and natural minor operation permits would be due no later than 60 days after publication. He expressed that DEP is in the process of getting the word out that the new fees are going into effect.

The Committee asked about the Oil and Gas rule. Mark Hammond responded that there were significant comments and we are working on the comment and response document and the 1st Quarter 2021 projection will be pushed back.

The Committee asked about the timeline for RGGI if the implementation date for January 1, 2022 was still projected. Mark Hammond explained that currently public hearings were being held and it will be dependent of the comments received and any changes made to the proposed rule.

PUBLIC COMMENTS

John Shimshock discussed some slides which represented his personal comments on RGGI. Patrick O'Neill suggested that he also submit those comments through the general RGGI process.

He brought up concerns on IPM modeling, the small amount of overall reductions, leakage to Ohio and economic loss of industry/communities. He also offered alternatives to reducing CO₂ on a short and long term basis.

ADMINISTRATIVE ITEMS

Patrick O'Neill opened the meeting for other AQTAC old and new business/open discussion.

Charlie McPhedran mentioned he is sending the SCR catalyst design presentation to DEP which is related to the questionable link in the October minutes.

Previous follow up items still open:

- Request to Lucas Hershey concerning information on HFC alternatives' downside analysis. (*Information will be presented to AQTAC when available.*)
- The technical support document related to the proposed RACT III rulemaking should be provided to the group when it is ready. (*AQTAC will be notified when/where information is publicly available.*)
- The public comments and DEP responses to RACT III issues (from the May 7th meeting) were requested to be provided to AQTAC, specifically to address Sierra Club and Maryland's comments. (*AQTAC will be notified when/where information is publicly available.*)

MOTION TO ADJOURN

Made by Kevin Stewart. Seconded by Joseph Duckett.

With no further business before AQTAC, Patrick O'Neill adjourned the meeting at 12:38. PM, EST.

Minutes prepared by Deborah Wehr, Air Quality Program Specialist (AQPS). For additional information about AQTAC, please contact the AQTAC Liaison (RA-EPAQTAC@pa.gov) or by visiting the AQTAC Web page at:

<http://www.dep.pa.gov/Business/Air/BAQ/AdvisoryGroups/Air-Quality-Technical-Advisory-Committee/Pages/default.aspx>