Pennsylvania Department of Environmental Protection AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING

DRAFT Minutes 2/11/2021

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

Rob Altenburg	\boxtimes	Kimberly Coy	\boxtimes	Joseph Duckett	\boxtimes	Michael Fiorentino	
Josie Gaskey	\boxtimes	Jayme Graham	\boxtimes	Joseph Guzek*	\boxtimes	Michelle Homan	
Judy Katz	\boxtimes	Charles McPhedran	\boxtimes	Gary Merritt	\boxtimes	Patrick O'Neill	\boxtimes
Richard J. Shaffer	\boxtimes	John Shimshock	\boxtimes	John Slade	\boxtimes	Kevin Stewart*	\boxtimes
John Tissue	\boxtimes	John Walliser	\boxtimes	Michael Winek	\boxtimes		

^{*}Joined after roll call

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

Mark Hammond	Kirit Dalal	John Krueger
Darek Jagiela	Deborah Wehr	Rebecca Day
Panna Chibber	Viren Trivedi	Krishnan Ramamurthy
Valerie Shaffer	Steve Hepler	6

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

Jesse Rodriguez, Exelon	Kathleen Robertson, Exelon	Chad Coy, Woodard Curran	
Teresa McCurdy, TD	Vanessa Lynch, Moms for	Matthew Page, Trinity	
Connections	Clean Air Force	Consultants	
Nicholas Leone, All4	Shannon Brown, PANPA	Miriam Baril, Boeing	
Andrew Ritter, Range	Michael Szczachor, Peerless	David Rockman, Eckert	
Resources	Manufacturing	Seamans	
Glendon King, PA House	Bill Kesack, CMI	Jeremy Hancher, EMAP	
Robert Routh, Clean Air	John Schmelzle, POWER	Ruben Rumbolo, Widener Law	
Council	Engineers	School	
Fen Labalme	Josephine Martin	Phil Covert, Citizen	
Jonathan Lutz, API	Charles Haney, EMAP	Matt Walker, Clean Air Council	
Elaine Labalme, EDF			

CALL TO ORDER

Patrick O'Neill, AQTAC Chair, called the 2/11/2021 meeting to order at 9:15 AM through Webex.

ADMINISTRATIVE ITEMS

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

December 10, 2020 DRAFT Meeting Minutes were open for discussion. No changes were discussed.

Approval of Minutes

The minutes from the 12/10/2020, meeting were approved unanimously.

Joseph Duckett made the motion.

Jayme Graham seconded the motion.

General Announcements

Mark Hammond, Director of the Bureau of Air Quality, thanked the attendees and introduced the topic of Exelon's presentation. He added that emissions from electric generation is the topic of current regulatory initiatives and understanding how electric generating sectors interact with dispatch is important. He reminded the group we are still looking for AQTAC members to help arrange presentations on renewables and natural gas generation dispatch.

Mark Hammond also mentioned that all AQTAC appointments expire this summer. If members would like to be considered for reappointment, please contact the AQTAC liaison at RA-EPAQTAC@pa.gov including a short explanation, a couple paragraphs, of your ability to provide technical advice to the Bureau, or a statement if you are no longer interested in serving on the Committee. Additionally, if members are aware of any good candidates for the committee, please forward those suggestions along with a resume. The Commonwealth has a strong interest in promoting equity through diverse representation on advisory committees, and the Department encourages members to consider this in their suggestions. Suggestions should be provided by the April meeting.

The Committee questioned if the request for speakers was related to the RGGI proposal and no longer needed. Mark Hammond responded that we are still interested in presentations from the renewable and natural gas sectors primarily, and combined heat and power generation as well.

PRESENTATION

Jesse Rodriguez, Director of State Government Affairs at Exelon Corporation made a presentation on Nuclear Power & Generation Dispatch.

Discussion

The Committee asked if Exelon has any goals for the upcoming PJM capacity market plan stakeholder discussion. Jesse Rodriguez responded that an internal group works on this and he doesn't have specifics but knows that preserving the nuclear market in the current economic market is a goal.

Rob Altenburg stated that rate pair impacts are valued above non rate pair benefits.

The Committee asked if Mr. Rodriguez had thoughts on the ability to meet climate goals in a deregulated market. Mr. Rodriguez confirmed that it would likely be difficult to go back to regulating the market; however, building large nuclear plants would be very difficult in a nonregulated environment due to the upfront costs. Small modular reactors may be more feasible. What is most important to Exelon, due to the expected life of the existing units into the 2050s, is preservation of current nuclear plants and the clean megawatts they produce.

The Committee asked if Exelon supports the RGGI proposal. Mr. Rodriguez stated that Exelon supports the RGGI proposal. It is in many PJM states already and acknowledges some of the benefits nuclear brings to the table including the facts that it is clean generation. One of the reasons Beaver Valley moved away from deactivating their plants was because RGGI would bring economic benefits to those plants because they are clean generation.

The Committee asked if there are other market changes Exelon wants to champion. Mr. Rodriguez replied that RGGI is a step in the right direction towards acknowledging clean generation, but other things must happen in the energy market as it evolves to sustain clean generation. More renewable energy and battery storage coming online will put pressure on energy prices. More resources on the low-cost side will create problems for nuclear down the road as we move towards the 2050 cleaner supply goals.

The Committee asked how far Pennsylvania is from imminent closure of another nuclear plant. Mr. Rodriguez replied that Exelon doesn't foresee a plant closure coming soon. However, that is probably a better question for Beaver Valley which was close to closing a plant, although RGGI will help their economics in the near term.

The Committee asked about distributed generation and the large number of small sources that generate less efficient, less well controlled fossil fuel driven energy and how it affects the nuclear market. Mr. Rodriguez replied that it does affect nuclear, but distributed generation moving forward will probably be more renewable driven with companies self-supplying rather than the current emergency generator used for reliability. It is an issue that states are looking at closely, but more on the margins than the other issues. Depending on how much distributed generation comes into the system over time, it is something that companies must look at as far as the impacts on the broader electric grid economics.

The Committee asked if there is a margin that nuclear looks at as far as price differential that would keep the incentive for operating nuclear plants. Mr. Rodriguez replied that he can't get into specific dollar amounts that are needed for nuclear, but RGGI creates uplift for nuclear and provides funds for transition. The Exelon plants are running safely and reliably.

The Committee asked what the lifecycle carbon emissions from nuclear are including radioactive waste and how it compares to natural gas and coal. Mr. Rodriguez replied that he can provide that information. Nuclear is on the lower end, tied with offshore wind and lower than solar, as well as significantly lower than coal and natural gas. **Follow-up: He will provide information on life cycle to the committee.**

The Committee asked the current status of disposal of radioactive waste in US. Mr. Rodriguez responded that there is no new information on long term storage, but it is being safely stored onsite. The Committee further asked if there is a significant incremental risk to increasing onsite storage such that it would necessitate shutting down plants early. Mr. Rodriguez responded that if it's being safely stored there isn't incremental risk or need to shut down early given all the benefits of nuclear. **Follow-up: He will provide information waste storage to the committee.**

Kirit Dalal asked if nuclear plants require regular maintenance shutdowns. Mr. Rodriguez responded that they can have forced (for repair) or planned refueling outages. They are designed to refuel every 18-24 months and Exelon usually requires approximately a 14-15 day shutdown to refuel. Units are staggered so that the whole plant isn't down at the same time.

PRESENTATION

Kirit Dalal gave an update on DEP Rulemakings and State Implementation Plan Revisions.

Discussion

The Committee asked about any updates to the applicability threshold exempting low threshold wells from LDAR in the oil & gas rulemaking. The Department responded that we have not heard that the EPA is reviewing the CTG. Mark Hammond responded that the DEP is in the process of reviewing comments on that issue. The committee also asked for a timetable for final form rulemaking on the oil and gas CTG. The Department is still working on the comment response document and does not have a timeframe for returning it to the committee.

The Committee wanted clarification on if the updated fees are effective. The Department confirmed that the fees became effective 1/16/21 and we are required to submit the rulemaking to EPA.

The Committee asked about RACT III and the 3rd circuit opinion. Has there been any update to changes being considered? DEP has removed presumptive RACT for coal fired EGU's in response to the opinion. Mark Hammond clarified that those facilities are doing case-by case RACT which are due April 1st.

Joe Duckett mentioned the Sierra Club objection to minimum temp for operation of SCR. He is still looking for more information on the topic in addition to what was previously provided. Mark Hammond stated in the Sierra Club decision, EPA was not provided enough evidence for 600-degree exemption, which is one of the reasons DEP is doing case-by-case exemptions with specific facility facts. There will not be a one size fits all number. A case-by-case RACT analysis requires a top down technology analysis that is not based on profit or economics for all BACT and RACT analysis, it is based solely on environmental benefit. Proposals will be reviewed carefully and must be supported. In terms of Maryland's optimization program, nobody has really looked at the program, which has a blanket exemption for startup and shutdown. Maryland does not require the case-by-case level of review.

Charlie McPhedran stated that the court focused on a temperature curve and the Sierra Club will be interested in seeing how the DEP case-by-case strategy progresses.

The Committee asked how many comments were received on the RGGI proposal which closed on the 14th. DEP responded 10,000 to 14,000 comments.

Public Comments

A comment was received via email at 9am this morning from Philip Covert. Mr. Covert spoke to the committee and expressed concern over the health and welfare of children and vulnerable population living near oil and natural gas operations, specifically in relation to VOC and methane emissions.

Follow up: Patrick will forward Mr. Covert's comments on to the Committee.

BUSINESS / OPEN DISCUSSION

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

Old Business

The Committee asked about a presentation on the Transportation Climate Initiative (TCI). Mark Hammond confirmed that PA has not joined but will continue to monitor and interact with states that did. This is separate from the ZEV rulemaking although both are related to transportation.

New Business

Joe Duckett mentioned a Department of Health and University of Pittsburgh School of Health epidemiological study being completed on health impacts of natural gas wells. Could the committee be briefed on this study?

Follow up: Mark Hammond said we can ask DOH to see if we can get a future presentation.

New Items to follow up for next meeting –

- Jesse Rodriguez will provide lifecycle emissions and onsite waste storage information on Nuclear power.
- Patrick O'Neill will forward Mr. Covert's comments to the committee. (*Emailed to AQTAC members on 2/22/2021*.)
- DEP will reach out to the DOH for a presentation on the Oil and Gas health effects. (DEP asked DOH for availability to present on this item on 2/17/21 and is awaiting a response.)
- Gary Merritt will provide a contact to speak about industrial combined heat and power to speak at the next meeting. (Mr. Merritt provided a contact to the AQTAC liaison on 2/11/21.)

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 Rob Altenburg. Seconded by John Tissue. With no further business before AQTAC, Patrick O'Neill adjourned the meeting at 11:01. AM, EST.

Minutes prepared by Rebecca Day and Deborah Wehr, Air Quality Program Specialists (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