MEMORANDUM

TO: Steam Electric Rulemaking Record

FROM: Danielle Stewart, ERG

DATE: June 8, 2020

SUBJECT: **Notes from Call with GenOn – SE08614**

On May 22, 2020, EPA conducted a call with GenOn to discuss the 2019 proposed revisions to the Steam Electric Rulemaking and GenOn's recent certification to the Maryland Department of the Environment to comply with the 2015 voluntary effluent limitation guidelines in 40 CFR 423.13(g)(3)(i) (DCN SE08700). See Table 1 for a list of meeting attendees, along with affiliation and contact information.

Table 1. List of Attendees

Name	Affiliation	Contact Information
Stephen Frank	GenOn	Email: stephen.frank@genon.com Phone: 724-249-3610
Keith Schmidt	GenOn	Email: keith.schmidt@genon.com Phone: 814-242-9447
Phillip Flanders	EPA	Email: flanders.phillip@epa.gov Phone: 202-566-8323
Richard Benware	EPA	Email: benware.richard@epa.gov Phone: 202-566-1369
Danielle Stewart	ERG	Email: danielle.stewart@erg.com Phone: 703-633-1703

Below is a summary of the topics discussed during the meeting.

- Maryland Department of the Environment (MDE) forwarded statements from GenOn, dated May 4, 2020, regarding elections for three of its coal-fired power plants to comply with the 2015 voluntary effluent limitations codified in 40 CFR 423.13(g)(3)(i). The elections impact the Dickerson, Morgantown, and Chalk Point Generating Stations (referred to hereafter simply as Dickerson, Morgantown, and Chalk Point).

- EPA reached out to GenOn regarding their decision-making process and to discuss how timing of their decisions may be impacted by finalizing the current reconsideration.

- EPA indicated that they are working towards finalizing the ELG by August 2020.

- GenOn, which split from NRG Energy in December 2018, indicated that even since the May 4 communication with MDE, decisions are still in flux. GenOn publicly announced on May 15 the retirement of the remaining coal-fired generating units at Dickerson. Electric generation is expected to end by August 1, 2020. Decommissioning activities will continue through 2020 and 2021.

- Opting into the voluntary incentive program (VIP) established by the 2015 rule extends the compliance dates for both Morgantown and Chalk Point until December 2023.

- GenOn requested permit extensions from MDE for both Morgantown and Chalk Point. GenOn reports that MDE was in the midst of denying those extensions.

- Both Morgantown and Chalk Point are operated infrequently. Chalk Point typically runs only 30-60 days a year and with the recent COVID-19 demand reductions, Morgantown has only operated a couple of days in the first half of 2020.

- For both plants, the minimal operation schedule and decreased energy demand forecasts as a result of COVID-19 forced GenOn's decision on the compliance strategy for the Steam Electric ELG.

- For both Morgantown and Chalk Point, GenOn is planning to install reverse osmosis (RO) systems. The expectation is that permeate will be recycled back to the absorber and brine (or salt crystals) will be disposed of offsite. GenOn continues to explore off-site disposal and beneficial use alternatives for the brine. At this time, waste disposal companies have tentatively approved the brine for treatment and/or disposal.

- GenOn reported that because these plants operate so infrequently, the RO system is the more economical choice. Operating the RO system for several weeks and paying for offsite disposal will be less costly than maintaining two biological treatment systems used to remove total nitrogen, total phosphorus and selenium during extended outage periods.

- Regarding the 2015 VIP requirements, the RO permeate is not expected to meet the requirements based on thermal condensate. The permeate stream will instead be returned to the gypsum dewatering system that is adjacent to the FGD wastewater treatment plant, using existing return piping. Assuming the 2019 proposed limits for VIP are finalized, this would add the ability to discharge this permeate stream.

- GenOn conducted on-site and off-site testing at its Dickerson (2019), Conemaugh (2016) and Chalk Point (2015) Generating Stations, evaluating Frontier and ABMet biological systems as well as RO systems. At Dickerson, the plan before announcing retirement was to utilize the existing chemical precipitation system with scale inhibitor and ultrafilter as pretreatment upstream of the RO system. Chalk Point's FGD WWTP is essentially identical to Dickerson's system and is anticipated to be configured in the same manner.

Morgantown's FGD WWTP is not equipped with an ultrafiltration system. GenOn is evaluating the need for an ultrafilter at Morgantown.

- Based on recent research, GenOn reported that temperatures seem to impact RO recovery. GenOn reported that higher temperatures coming out of the absorber may result in lower quality permeate. GenOn is continuing to evaluate impacts associated with temperature. However, Chalk Point and Morgantown FGD treatment systems are equipped with heat exchanger systems that can be used to maintain an optimal temperature range.

- Regarding how Chalk Point and Morgantown will comply with the revised ELG, GenOn reports it will evaluate options for both plants once requirements are finalized. Planning is in progress to identify qualified RO technology suppliers and solicit bids. If the 2019 proposal is finalized as is, Chalk Point would meet the proposed low utilization subcategory and GenOn reports it would likely exercise that option if it is available. Morgantown has decreased its capacity utilization recently and may also qualify for a low utilization subcategory. All options under the new rule will be evaluated including continuation of VIP plan and possible retirement under the revised ELGs.

- Chalk Point currently recycles roughly 85% of its bottom ash transport water using hydrobins and surge tanks. A remote mechanical drag system is currently under construction but is roughly 3 months behind due to COVID-19 staffing delays. Due to COVID-19, contractors left the station in March and would not return, as a result new contractors were hired and mobilized on May 5. Work continues utilizing new COVID-19 practices. GenOn is planning to submit an extension request to MDE, asking for the BA permit requirements to be extended until March 2021 with the provision to extend in one month increments beyond that based COVID.

- Morgantown currently operates a mechanical drag chain system for bottom ash and is already compliant with the bottom ash requirements in the ELG.

- GenOn stated that having a transition from the 2015 requirements to any new requirements delineated in the final rule would be beneficial. There seems to be a difference of opinion at GenOn and at MDE as to when requirements are to begin.

- EPA expressed a desire to draft a rule that might prevent plants who have started construction from wasting money or having to redo design or planning work.

- GenOn stated that it is important to consider fairness across the industry and that requiring one set of rules for some and not others would be unfair in a competitive market. GenOn also indicated that prior to the 2019 proposal, they had tested a design for optimizing the existing biological treatment systems to reduce selenium that showed some success, but need to scrap that plan because of the imminent permit compliance deadline, the impending extension request denial by MDE and uncertainty of finalization and the timing of the release of the 2019 rule.

- GenOn asked if EPA was planning to propose any requirements for leachate. EPA indicated that the priority is to finalize FGD wastewater and bottom ash transport water requirements. And leachate work would be next on the horizon.