May 26, 2020

Mr. Nate Rozic
Keystone Power, LLC/ Keystone Station
175 Cornell Road, Suite 1
Blairsville, PA 15717-8076

RE: Keystone Station Four-Factor Analysis for Regional Haze

Dear Mr. Rozic:

On January 10, 2017, the U.S. Environmental Protection Agency (EPA) finalized revisions to State Implementation Plan (SIP) requirements for the protection of visibility in mandatory Class I Federal areas under Sections 169A and 169B of the Clean Air Act (CAA). These revisions to the 1999 Regional Haze Rule (RHR) are applicable to the second and subsequent implementation periods, and requires states to submit a revised SIP to EPA by July 31, 2021.

The Pennsylvania Department of Environmental Protection (DEP or Department) is currently in the process of developing a Regional Haze SIP for the second planning period, which covers the years 2018 through 2028. Although there are no Class I Federal areas in Pennsylvania, emissions from Pennsylvania sources affect those in other nearby states (i.e. Acadia National Park (ME), Brigantine Wilderness Area (NJ), Dolly Sods Wilderness Area (WV), and Shenandoah National Park (VA), etc.).

In the first regional haze planning period (2001-2018), Best Available Retrofit Technology (BART) was statutorily required to address reasonable progress and a deciview threshold. For this second planning period (2018-2028) and subsequent planning periods, there is no BART or deciview threshold requirements, rather the CAA and RHR requires reasonable progress through an analysis of four factors laid out in Section 169A(g)(1) of the CAA:

1. The cost of compliance;
2. The time necessary for compliance;
3. The energy and nonair quality environmental impacts of compliance; and
4. The remaining useful life of any existing source subject to such requirements.

EPA guidance specifies that since regional haze results from a multitude of sources over a broad geographic area, progress may require addressing many relatively small contributions to impairment. Thus, a measure may be necessary for reasonable progress even if that measure in isolation does not result in perceptible visibility improvement.
Pennsylvania is part of the Mid-Atlantic Northeast Visibility Union (MANE-VU\textsuperscript{1}), in which the members work collaboratively to develop emission control strategies to address visibility impairment. On August 25, 2017, MANE-VU issued a statement, referred to as the 2017 MANE-VU “Ask”, in which six emission management strategies were proposed in order to meet the 2028 reasonable progress goals for regional haze. While many strategies were directed at states to adopt, one strategy requires input from five Pennsylvania facilities with electric generating units, due to modeling that showed potential visibility impacts of 3.0 Mm\textsuperscript{-1} (inverse megameters) or greater to one or more MANE-VU Class I areas. This analysis listed Keystone Station as a facility required to conduct a four-factor analysis.

In addition to the facilities identified by MANE-VU, the National Park Service (NPS; a Federal Land Manager with the opportunity to consult and comment on state’s Regional Haze work) screened emission sources that may impact Class I Federal areas in national parks, using an emissions over distance (Q/d) analysis.\textsuperscript{2} The NPS provided DEP with a list of forty Pennsylvania facilities that impact Shenandoah National Park in Virginia with a Q/d > 1.0. The Department noted that reasonable progress can be achieved by focusing on facilities with an above average impact. DEP set a threshold by calculating the average Q/d value of the forty Pennsylvania facilities impacting Shenandoah National Park, which equaled 12.79. Facilities with a Q/d > 12.79 average emissions impact are required to conduct a four-factor analysis. Keystone Station was identified as a source of emissions with a Q/d value of 124.4, which exceeds the threshold of 12.79.

Therefore, DEP requests that you prepare a four-factor analysis for sulfur dioxide (SO\textsubscript{2}) and oxides of nitrogen (NO\textsubscript{x}) for subject sources at your facility (see attachment). The Department will review your analysis as part of its determination of what emission control measures may be necessary as part of determining reasonable progress. DEP will then submit the analysis to EPA in support of the Regional Haze SIP for the second planning period.

DEP has provided an attachment with resources and links to assist in your analysis. DEP understands the time and resources that go into conducting a four-factor analysis and suggests that your analysis be concise, yet thoroughly documented. Please submit the analysis via email to Bryan Oshinski at boshinski@pa.gov and Robert Cook at rwcook@pa.gov by July 31, 2020.

\textsuperscript{1} MANE-VU includes the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and the District of Columbia, as well as tribal members Penobscot Indian Nation and St. Regis Mohawk Tribe.

\textsuperscript{2} In the Q/d analysis, Q is defined as annual emissions of oxides of nitrogen (NO\textsubscript{x}) and sulfur dioxide (SO\textsubscript{2}) in tons, divided by kilometers between a source and the nearest national park.
Should you have questions, or if current circumstances require additional time, please contact Bryan Oshinski, Air Quality Program Specialist of the Air Resource Management Division, by e-mail at boshinski@pa.gov or by telephone at 717.783.8949 or Robert Cook, Air Quality Engineering Specialist of the Bureau of Air Quality’s Permitting Division, by email at rwcook@pa.gov or by telephone at 717.772.3974.

Sincerely,

Viren Trivedi
Acting Director

Enclosure

cc:  Mr. Kirit Dalal
     Mr. Randy Bordoner
     Mr. Nash Bhatt
     Mr. Bryan Oshinski
     Mr. Robert Cook
     Mr. Eric Gustafson