Cooling Water Intake Structure/Clean Water Act: Sierra Club Petition Before the U.S. EPA Environmental Appeals Board Challenging Power Plant NPDES Permit Modification

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The Sierra Club and Conservation Law Foundation (collectively "Sierra Club") submitted a June 16th Petition for Review ("Petition") before the United States Environmental Protection Agency ("EPA") Environmental Appeals Board ("EAB") challenging a Clean Water Act National Pollutant Discharge Elimination System ("NPDES") permit modification for the Schiller Station ("Schiller").

The Petition describes Schiller Station as a power plant operated by Granite Shore Power which primarily burns coal and has an electrical output of 163 megawatts.

The Schiller Station is located on the southwestern bank of the Piscataqua River. This includes a 12-mile-long estuary that marks the boundary between coastal New Hampshire and Maine. The river is stated to be the:

. . . gateway for all organisms migrating to and from the Great Bay and Little Bay estuaries.

Schiller Station is stated to use a once-through cooling system that withdraws water from the Piscataqua River. The cooling water is used to extract waste heat, and the heated water is discharged back to the river. The once-through cooling system is described in the Petition as drawing through two cooling water intakes which at full capacity withdraw 125.8 million gallons of water per day from the Piscataqua River.

Sierra Club's Petition before the EAB challenges a NPDES permit modification issued by EPA Region 1 to Schiller on May 17th. The environmental organizations argue that the alternative compliance option for the entrainment reduction Best Technology Available ("BTA") introduced in the 2023 NPDES permit modification is:

. . . based on findings of fact and conclusion of law that are clearly erroneous and arbitrary, impermissibly resulting in less stringent permit conditions.

The Petition objects to the allowance of cooling water intake structure ("CWIS") flow limits as an alternative compliance option for the entrainment BTA (which is stated to have been previously determined in a 2018 NPDES permit to be wedgewire screens.) They disagree with what is characterized as EPA's justification which is that CWIS flow limits would achieve a comparable level of entrainment reduction to the level achieved by wedgewire screens. Instead, the organizations argue that the CWIS

flow limits in the 2023 NPDES permit modification will not result in actual reduction in entrainment. This is argued to undermine a 2018 BTA determination.

Issues identified by the Sierra Club in the Petition include:

1. The Region's inclusion of a CWIS flow limit alternative compliance option for the previously-determined wedgewire screen BTA for CWIS requirements to minimize entrainment (Part A.11.a.1.i); and
2. The Region's selection of a CWIS flow limit that will not reduce entrainment at Schiller (Part I.A.2).

A copy of the Petition can be downloaded here.