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Feds Want PSNH to Cool Down Bow Plant
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The Merrimack River needs to cool down, according to the EPA, which on Thursday released a draft permit that would require Public Service of New Hampshire to spend an estimated \$112 million to reduce the temperature of cooling water discharged from its coal-burning power plant in Bow.

The Environmental Protection Agency wants PSNH to build a closed-cycle cooling system, which would take much less water from the Merrimack River and lower the temperature of its discharges by 99 percent, the agency said.

It would also mean higher prices for Merrimack Station electricity, about \$1.15 to \$1.35 more a month for the average residential user.

The Merrimack Station uses massive amounts of water — 287 million gallons a day — to generate steam and also to cool the steam.

That water ends up in a discharge canal where it eventually flows back into the river, hotter and devoid of fish larvae and other aquatic organisms.

“This heated water, in turn, raises water temperatures in the river, which degrades the river’s aquatic habitat and harms its aquatic life,” the EPA said in a statement issued Thursday.

PSNH said it was caught unaware Thursday by the proposed Clean Water Act permit, which still must go through a public hearing and comment period. Fourteen years ago, PSNH applied for a permit renewal, and it has heard little since then, said company spokesman Martin Murray.

He said Congress is now studying the Clean Water Act and its associated rules and may modify them next year.

Murray said the company has no analysis that supports the need for a cooling tower.

“We’re eager to understand the analysis,” Murray said. “We need from the EPA: how did you come to that conclusion, and why?”

He said the Merrimack River has not been harmed by Merrimack Station and PSNH is a good steward of the river.

But in the proposed permit, the EPA said that PSNH regularly exceeds its permitted temperature levels for discharged water. Heat is a pollutant under the Clean Water Act.

“Evidence as a whole indicates that Merrimack Station’s thermal discharge has caused, or contributed to, appreciable harm to Hooksett Pool’s” balanced fish population, the EPA said.

All species of fish in Hooksett Pool, the five-mile stretch of the river beside Merrimack Station, fell by 94 percent since the 1960s, the EPA said. Most fish in the pool now are “thermally tolerant species,” and thermally sensitive species such as yellow perch have declined, the EPA said.

A sampling of EPA-released data show the river anywhere from 3 1/2 to 9 degrees Fahrenheit warmer a half-mile downstream from the effluent discharge point.

Merrimack Station also destroys fish eggs, larvae and other aquatic organisms in its operations, and water velocity at the intake pipes harms juvenile and mature fish when they are trapped against intake screens, the EPA said.

Mortality of fish eggs and larvae would drop 95 percent with the new system, the EPA said.

The agency estimated that the additional costs would lead to increases between 1.1 and 1.3 percent on the average residential bill for customers.

“EPA does not take any resulting increase in electric rates lightly, but judges this increase ... to be affordable and reasonable,” the agency said in the permit.

The Conservation Law Foundation, which wants to make New England coal-free by 2020, applauded the proposed permit. PSNH is struggling to operate the plant legally, said Jonathan Peress, vice president and director of the Foundation’s Clean Energy and Climate Change program.

“No matter what PSNH spends, it will not be able to turn this 50-year-old dinosaur into an economically viable generating facility that benefits the people of New England,” Peress said. “Still, as long as this plant remains in operation, it must comply with the law, and we commend EPA for holding PSNH accountable.”

PSNH is in the finishing stages of installing a state-mandated \$430 million scrubber system that will remove mercury and sulfur from its air emissions. A public hearing on the proposed permit is scheduled for 6:30 p.m. Nov. 3 at the New Hampshire Department of Environmental Services headquarters in Concord. A public comment period runs until Nov. 30.