The Agency erroneously calculated the cost-effectiveness by not including a baghouse for mercury control. When the cost and efficacy calculations are corrected, the cost-effectiveness for non-mercury HAP metals is ***$24.7 million*** per ton, not ***$756,000*** per ton, and the cost-effectiveness for mercury is ***$713,000*** per ton, not ***$32,000*** per ton.[24]

D. EPA Relied on Erroneous Data to Calculate Energy Required to Implement the Proposed BTF Measures at Jewell

EPA wrongly calculated that the increased energy to meet these proposed requirements would be ***15.1 million*** kilowatt-hours of increased electricity use. 88 Fed. Reg. at 55858, 55894 (Aug. 16, 2023). SunCoke has not been able to locate any analysis by EPA that supports these estimates, thereby depriving SunCoke of the opportunity to analyze the "connection between the facts found and the choice made." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43 (1983). SunCoke's calculation shows that the true increase in energy would be ***93.18 million*** kilowatt hours (more than six times EPA's estimate).

E. EPA Did Not Consider Non-air Quality Health and Environmental Impacts of the Proposed BTF Measures

Related to its grossly inadequate estimate of the energy requirements for its proposed controls, EPA did not sufficiently consider the infrastructure upgrades that would be needed to serve the controls. At a minimum, the following electrical infrastructure upgrades would likely be required to address the incremental power demand of 10.5 MW:

- An upgraded Appalachian Power Company substation for an additional 69 kV load;
- Roughly 4,000 feet of 69 kV transmission line;
- A new substation at the Jewell site to receive 69 kV and step down to 4160V for further distribution across the plant;
- 4160V switchgear and motor control centers for multiple induced draft fans; and
- 4160V stepdown to 480V, switch gear, and motor control centers for ancillary gear serving the baghouse and ACI systems.

Moreover, in light of Jewell's topography, installing the infrastructure could require surfaces to be levelled and forested areas to be cleared. These electrical upgrades would likely impact wetlands, visual resources, soils, and/or vegetation and wildlife species in the affected areas, which EPA does not appear to have considered. This is especially true given the forested surroundings for the plant and the fact that the entirety of the facility lies in a floodplain; for this reason, federal law requires EPA, before requiring changes that would impact floodplains, to "consider alternatives to avoid adverse effects and incompatible development in the floodplains."[25] In addition, the increased 10.5 MW demand would increase CO_2 emissions by more than an estimated 46,000 tons annually just to produce the electricity needed to run such a system. EPA further underestimated

[24] *Compare* Tab. 6 with Attachment D (TRC Technical Memo) at 5.
[25] Exec. Order 11988—Floodplain Management, § 2(a)(2).