

Dear PUC,

I have lived in East Pikeland for more than 30 years, including the period before the power plant was decommissioned. When I moved here, the township was more rural. Since 1990, its population has grown by more than 40%. The longer-term change is even more pronounced: from the 1950's when the plant was built to 2020, the population increased by 590% (all figures from census.gov). Nearby communities have experienced similar growth. As a result, a new power plant would affect far more residents than the original facility did when it was built.

In the 2000s, substantial community opposition to Exelon's proposed expansion contributed to the decision to decommission the plant.

Nearly the entire Cromby site lies within the Schuylkill River's 0.2% annual-chance, or 500-year, floodplain as shown on the effective FEMA Flood Insurance Rate Map. That flood study dates to the early 1990s. Because the original Cromby plant was built before FEMA and the National Flood Insurance Program (NFIP) existed, flood risk was not considered when the site was selected.

Recent analyses of river-gage data indicate that flood discharges have increased substantially since that study because of factors such as greater upstream development, longer gage records, and changing rainfall patterns. A preliminary analysis using USGS StreamStats estimates the 1% annual-chance, or 100-year, flow at approximately 79,000 cubic feet per second (cfs), compared with FEMA's estimate of 63,400 cfs upstream of the French Creek confluence. This represents a 24% increase in flow at the Cromby site for this benchmark flood frequency.

American Society of Civil Engineers Standard 24-24, *Flood Resistant Design and Construction*, establishes minimum flood-resistant design and construction requirements for structures in flood-hazard areas that are subject to building codes or floodplain-management regulations. The standard is intended to meet or exceed NFIP requirements. It applies to new construction, subsequent work on those structures, and substantial improvements to existing nonhistoric structures. Under ASCE 24-24, essential and critical facilities classified as Flood Design Class 4 (ex. power plants) must be elevated or protected to the 1,000-year flood elevation.

For the reasons described above, I do not believe that construction of a new power plant on this site is a responsible idea. Note that I am expressing my opinion as a resident and a Professional engineer, Board Certified in Water Resources Engineering, and a Certified Floodplain Manager.

Sincerely,

Kim Dunn, PE, BC.WRE, CFM