Data Centers and Our Region

March 9, 2025

Pittsburgh, PA, Charleston, WV

OnRAMP Magazine

(by Moore Capito and Justine Kasznica)

Data center is fast becoming a household term.

Nearly everyone in the modern world benefits from data centers. As the "backbone" of digital infrastructure, data centers are becoming more and more critical in meeting the demands of the modern digital world. With advances in artificial intelligence (AI) and the increased reliance on computing by people all over the world, demand for data centers is outpacing supply.

We are in a global modern-day gold rush to build data centers. And just as the 49ers faced infrastructure challenges of the day, data center developers are facing a critical infrastructure obstacle: energy.

A data center is a physical facility that houses servers that manage, store, and process data. There are several types of data centers, and while all do not require the same prerequisites to develop, they all require vast amounts of electricity. According to the United States Department of Energy, data centers account for 2 % of the electricity usage in the country consuming 10 to 50 times more electricity per floor space than a typical commercial structure.

The electricity required to power data centers is adding stress on grids that are already pushing the limits. Utilities are having difficulty guaranteeing the level of power required to sustain current demand and meet projected future demand. As a result, developers are evaluating alternative ways to power their projects.

Recently, Microsoft entered into a power purchase agreement with Constellation Energy to reopen Three Mile Island to power their data centers and Amazon Web Services (AWS) purchased Talen Energy's 1,200 acre data center campus which provides direct power from the Susquehanna Steam Electric Station. Tech companies and developers are no longer waiting on the utilities and are trending toward establishing dedicated power sources. This trend provides energy rich states an incredible opportunity.

Energy companies are actively exploring how to provide direct power ranging from laying additional pipelines to evaluating construction of new power plants dedicated to powering data centers. As evidenced by the recent Constellation Energy and Talen Energy deals, states like West Virginia and Pennsylvania offer an attractive proposition to data center developers – access to vast amounts of energy sources, affordable land and proximity to densely populated areas. Additionally, our two states boast incredible research and development institutions, including Carnegie Mellon University, the global leader in artificial intelligence (AI) research and development. As a result, this region is well positioned to be the next hub for data center development.

Of course, there are challenges. Navigating the regulatory environment, finding suitable property, and identifying partners with available energy supply are just a few. Our firm, Babst Calland, specializes in environmental, energy, and emerging technologies law. As such, we are perfectly situated to connect those pieces because we understand each geographic footprint and tailor legal strategies accordingly, with a deep knowledge of state regulation and local jurisdictions. We provide the cross-disciplinary legal team to address these challenges and support regional and national data center projects.

The demand for data centers is growing and projected to grow even faster. We know the greatest challenge is meeting the electricity requirements. We have an abundant supply of natural resources, affordable land, artificial intelligence research and development, and proximity to densely populated areas. Now is the time to leverage those strengths. If we do so, our region is poised to benefit greatly from this rush for data centers.

With increased demand for complex data center development, whether navigating potential legal challenges related to financing, project siting, land acquisition, zoning, or regulatory compliance, Babst Calland is prepared to address the region's most pressing concerns.

To view the full article, click here.

