

Mission Critical IT Infrastructure

In 2017, BPA identified areas of its business that require improvements in order to maintain grid reliability and to be prepared for participation in evolving markets. The resulting Grid Modernization roadmap includes an objective to modernize Mission Critical infrastructure. BPA currently operates and maintains three data centers for Mission Critical systems – one in the J-org headquarters data center for Power applications, one in the T-org Dittmer data center for Transmission applications and one at Munro which hosts operational duties for lower voltage transmission and serves as the back-up and recovery site for operations hosted at the other two data centers. Each of these data centers uses differing infrastructure hardware, monitoring and operations software, and service delivery approaches.

The Dittmer Data Center is in the most urgent need of updates, as it has grown through piecemeal efforts without due consideration for evolving best practices and long-term support cost implications. Most production applications are hosted on physical servers and many are running on operating systems at or near “end of support.” The data center operates multiple generations of server hardware, requiring an extensive inventory of spare parts. The components in the Munro data center supporting Transmission systems face the same problems and are also in scope. The infrastructure for Critical Business Systems (CBS) hosted at the HQ Data Center has recently been upgraded and standardized to model industry best practices and is not in scope.

The focus of the MCIT Infrastructure initiative is to unify the hardware, software and services across these data centers through a greenfield replacement of end-of-life, out-of-support and other archaic infrastructure in the Dittmer data center and similar systems at Munro. These upgrades will align with the standards and practices being used by CBS.