Information Technology

The objective of the Information Technology ("IT") capital planning process is to create a forward-looking roadmap for deploying technology solutions that deliver tangible benefits for customers while meeting the evolving needs of GMP's business and operations. These solutions include hardware, software, cloud-based services, and cybersecurity enhancements. The IT plan also addresses integration with operations technology ("OT") to support an increasingly dynamic, bidirectional energy grid.

As technology-based platforms become the primary touchpoints for customer engagement—and as IT-enabled systems underpin critical field operations across all departments—our strategic planning prioritizes resiliency, security, affordability, and innovation. We focus on ensuring the integrity and availability of core operations under all conditions, including extreme weather events, cyber and physical threats, and regional supply constraints.

The IT capital planning process identifies capital projects that deliver value to our customers in several ways:

- Customer Service Improvements
- Operational Improvements
- Capacity Improvements
- Security Improvements
- New Technologies
- Resiliency Improvements

Customer Service Improvements: Projects that expand and enhance the digital tools, platforms, and interfaces customers use to engage with GMP. These investments focus on making services easier to access, improving self-service capabilities, and enabling clear, two-way communication—particularly during outages, program enrollment, and emergency events. Improvements include upgrading online and mobile account management, integrating real-time energy usage and billing data, and ensuring accessibility for all customers, including income-qualified households.

Operational Improvements: Modernization of the technology platforms that support GMP's core electric system operations, field workforce, and customer programs. These improvements enhance reliability, resiliency, and operational efficiency while enabling seamless integration of distributed energy resources (DERs). Initiatives include upgrading Supervisory Control and Data Acquisition (SCADA) and Distribution Management Systems (DMS), enhancing outage management capabilities with AMI-driven alerts and GIS integration, expanding mobile tools for field crews to access real-time asset and work order data, and scaling analytics infrastructure for predictive maintenance, load forecasting, and scenario modeling. Operational upgrades are closely coordinated with resiliency initiatives to ensure technology readiness for evolving grid demands.

Capacity Improvements: Projects that expand and strengthen GMP's technology capacity to meet the evolving digital requirements of customers, operations, and the grid. As operations have become increasingly automated, the volume of data, network traffic, and system interactions has grown substantially—across internal systems, in the field, at plants and substations, and in the cloud. Capacity investments ensure that computing, storage, and network infrastructure can scale to handle increased telemetry from AMI, SCADA, DERMS, and other critical platforms. These projects also enhance performance and resiliency by upgrading bandwidth, processing power, and data storage capabilities; adding redundancy and failover paths; and supporting real-time analytics for operational decision-making.

Security Improvements: Enhancements to safeguard GMP's systems, networks, and data from cybersecurity and physical threats, in alignment with the NIST Cybersecurity Framework, CIS Controls v8, and NERC standards. Investments include strengthening perimeter defenses, expanding endpoint detection and response capabilities, improving network segmentation, and enhancing real-time monitoring within GMP's 24/7/365 Security Operations Center (SOC) recently put in service. Security projects will also address physical hardening of operational technology (OT) at substations, plants, and field locations, and ensure compliance with evolving federal and state requirements. These measures protect critical infrastructure, maintain customer trust, and reduce the risk of service disruption from cyber or physical attacks.

New Technologies: Deployment of emerging tools and platforms that can deliver improved outcomes for customers, enhance grid operations, or reduce costs. This includes piloting and integrating advanced analytics, artificial intelligence (AI), and automation for applications such as vegetation management, DER optimization, load matching to renewable generation, and predictive asset maintenance. New technology investments are evaluated for safety, interoperability, scalability, and cost-effectiveness before broader deployment, ensuring alignment with Vermont's energy policies and GMP's IRP objectives.

Resiliency Improvements: Technology projects that strengthen GMP's ability to deliver reliable service during extreme weather, physical threats, or regional grid disruptions. These investments often work in concert with field infrastructure upgrades, including control systems for feeder back up and self-healing circuits, local energy storage management, and hardened communications. Resiliency projects focus on maintaining continuous operation of mission-critical systems—such as outage management, SCADA, and customer communication platforms—even during grid outages, while enabling faster restoration and better coordination between field crews and system operators.