Exhibit to Agenda Item #1b

Technology & Innovation 2022 Proposed Budget.

Board Finance & Audit Committee and Special SMUD Board of Directors Meeting Wednesday, November 10, 2021, scheduled to begin at 5:30 p.m. Virtual Meeting (online)



Technology & Innovation

2022 Proposed Budget & Initiatives

Stephen Clemons
Chief Innovation & Information Officer





Business Segments & Functions



Strategy & Innovation	Strategic Initiatives	Infrastructure & Operations	Cybersecurity	Applications
Innovation	Project Delivery	Project Delivery	Cyber Governance, Risk & Compliance	Project Delivery
Project Management	Operational Support & Problem Resolution	Operational Support & Problem Resolution	CIP Compliance	Operational Support & Problem Resolution
Business Relationship Management	Contracts & License Management	Operations Architecture	Cyber & Privacy Program	Technology Enhancements
Quality Assurance	Analytics & Data Governance	Planning & Assessment	Threat Assessment & Response	Planning & Assessment
	Enterprise Architecture	Compliance	System Security Operations	
	Technology Enhancements		Incident Response & Emergency Operations	
	Planning & Assessment			





Safety & Reliability

Technology is embedded in SMUD safety practices: including ensuring work site conditions are safe before crews leave the shop, to providing equipment that enables safe behaviors whether in the office, at home or in the field, and more. **Reliability and technology go hand in hand** in ensuring our platforms are available, are future-ready, and can track and manage our regulatory compliance.

- Implement Safety Management System to better analyze and show results of SMUD's safety culture
- SD-6, 8,17
- Install video monitoring system to more locations in the Upper American River Project (UARP) and at Solano Wind Farm, providing real-time remote assessments of site conditions
- Replace existing Perimeter Intrusion Detection Systems (PIDS) at SMUD substation sites
- Ensure SMUD's applications and technology infrastructure are continually available, reliable, secure and in compliance
- Increase capacity and reliability of our fiber network







Safety & Reliability

Cybersecurity

- Manage enterprise risk across cybersecurity, physical security, customer privacy and records management
- Continue to mature our cybersecurity best practices, focusing on the National Institute of Standards and Technology (NIST) framework for Risk and Physical security.
- Collaborate across SMUD business units for the 2022 North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) compliance audit, conducted by the Western Electricity Coordinating Council (WECC)
- Focus on recruitment and retention of Cybersecurity staff

SD-16, 17







Technology supports affordability by providing positive returns on investments for both platform enhancements and new deployments. Our technical expertise, combined with a focus on value delivery, makes SMUD more efficient, effective and productive.

Manage technology platforms of today and tomorrow

SD-2, 5, 10, 19

- Implement new customer self-service platform initially focused on commercial customers through Joint Collaboration Agreement (Innovation Generator)
- Optimize technology infrastructure spending through Enterprise Architecture,
 Application Rationalization and new software license tracking technology
- Improve SMUD's customer experience deliveries by leveraging the SAP C/4 HANA platform Customer 360 view
- Program and implement new rates to support the 2030 Clean Energy Vision (Critical Peak Pricing, Successor Net Energy Metering, Electric Vehicle Charging as a Service)



Integrated Project Management Office (PMO) focused on technology and innovation

SD-2, 4

- Centralized project management best practices
- More effective use of project management staff
- Centralized reporting on projects and project spend
- Further Implementation and utilization of Agile Methodology
- Better reporting and analytics on our projects
- Implementation of centralized Project and Portfolio Management tool (Service Now PPM)
- Testing Center of Excellence ROI and improved Quality Assurance







Organizational Agility

Technology supports Organizational Agility through Innovation to deliver the tools needed during extraordinary circumstances. We facilitate the foundational technologies that enable the 2030 Clean Energy Vision.

Innovation and an innovative culture

- #OneSMUD innovation process and portal launched in 2021 transparent and inclusive processes for gathering ideas from all SMUD staff
- Collaborate to develop and implement a unified approach to business and technology innovations and to facilitate a more innovative culture
- Implement technologies needed for our "New Normal" hybrid work environment
- Complete deployment of mobile work management technology
- Continue multi-year transformations of our core Enterprise Resource Planning (ERP) and Human Resources systems

SD-8, 10, 17







Organizational Agility

Optimize Business Process with technology efficiencies over the next three years

- Transform Human Resources Systems
 - Replace nine disconnected systems with one modern integrated platform – SAP Success Factors
 - Administrative work time shifting to more strategic or critical focus
 - Eliminates merging of data from disconnected systems
 - Increases operational excellence
 - Provides an improved candidate and employee experience







Environmental Leadership

Technology supports Environmental Leadership by bringing foundational tools to facilitate decarbonization and the achievement of the 2030 Zero Carbon Plan. We partner on all existing and future efforts throughout their lifecycle: Data integration; Virtual power plants; Vehicle to Grid; Load management and more.

- Continue to develop the Advanced Distribution Management System (ADMS), bringing two-way communication with Distributed Energy Resources (DER) across a more decentralized grid
- Develop technology to support creation of Solar/Storage and Multi-DER Virtual Power Plants
- Deliver specialized Distribution Planning Load and Distributed Energy Resource (DER) Allocation software to show DER effects on the grid
- Develop technology to support new Advanced Demand Response programs

SD-7, 9, 4, 10



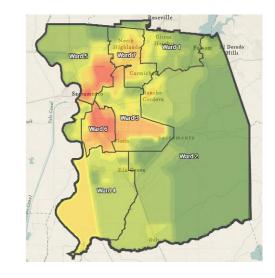




Community Vitality

Technology supports Community Vitality by creating and evolving customer-centric infrastructures and analytics that serve the Community at large. All interactions are supported, from foundational MyAccount information through emerging 2030 Clean Energy Vision partnerships.

- Improve the customer experience by upgrading our Contact SD-5, 2,
 Center technology platform to provide robust and 8, 6
 integrated services to customer service agents
- Continue to evolve and improve mobile applications to improve the customer experience
- Develop advanced business intelligence and analytics to improve SMUD services to our community
- Innovative partnerships with Information Technology companies to develop technologies that better serve our community







2022 Proposed Budget



