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**Presentation Title:** SMUD Energy StorageShares: The First Virtual Energy Storage Program in the US

**Abstract:** Alignment of customer benefits with grid needs is one of the most significant challenges facing Utilities with distributed energy resources. This is particularly true for battery energy storage. There is massive potential to create benefit, but there are very few existing business models that manage to fully align these priorities. SMUD's innovative Energy StorageShares program is a partnership which allows commercial customers to maximize the benefit from their investment in energy storage while minimizing SMUD's cost to upgrade or deploy new infrastructure for the grid. In this first-of-its-kind program in the nation, eligible commercial customers make an up-front investment to SMUD for shares in the program, and in exchange, receive a monthly on-bill credit for a 10-year term. The program provides guaranteed savings to the program customers without impacting their business operations, maintenance obligations or requiring physical space at their business for a battery system. SMUD bundles the investments from the program participants with our own capital and procures a battery in a location that increases grid benefits. The initial release of shares and deployment of the utility-scale battery is being evaluated by SMUD's research and development group to ensure the physical battery benefits align with financial models and that the customers benefits match the value that a behind-the-meter battery system would have provided. This evaluation is a critical component needed to ensure successful scaling of the Energy StorageShares program. In addition, customer education is an important component to the Energy StorageShares program. After a customer expresses interest in the Energy StorageShares program, SMUD provides a load analysis to the customer showing them the benefits they could expect from a battery system. This analysis includes an estimated system size, estimated potential demand charge reduction and potential annual savings.