Exhibit to Agenda Item #4 & 5

4. Discuss authorization to submit a SMUD Clean PowerCity Pathways project grant application to the Department of Energy (DOE) for the Grid Resilience and Innovation Partnerships (GRIP) Topic Area 1 (TA1) Grant (Grant) and authorize the Chief Executive Officer and General Manager to negotiate and execute in the name of Sacramento Municipal Utility District a GRIP grant recipient contract with DOE as well as all grant documents, including, but not limited to, applications, agreements, amendments and requests for payment, necessary to facilitate grant participation.

5. Discuss authorization to submit a SMUD ReImagining Thermal Resources Operations: Fleet in Transition (RETROFIT) project grant application to the Department of Energy (DOE) for the Grid Resilience and Innovation Partnerships (GRIP) Topic Area 3 (TA3) Grant (Grant) and authorize the Chief Executive Officer and General Manager to negotiate and execute in the name of Sacramento Municipal Utility District a GRIP grant recipient contract with DOE as well as all grant documents, including, but not limited to, applications, agreements, amendments and requests for payment, necessary to facilitate grant participation.

Board Finance & Audit Committee and Special SMUD Board of Directors Meeting
Tuesday, March 19, 2024, scheduled to begin at 6:00 p.m.
SMUD Headquarters Building, Auditorium
Agenda

• Grid Resilience and Innovation Partnerships (GRIP) Program
  • Topic Area 1- Grid Resilience Project Overview
  • Topic Area 3- Grid Innovation
Grid Resilience and Innovation Partnerships (GRIP) Program
In October 2023, SMUD was awarded $50 million from the Department of Energy for implementation of Topic Area 2: Smart Grid Grants.
Fiscal Year 2024/2025 GRIP Grant Opportunity

**Topic Area 1: Grid Resilience Utility and Industry Grants** (fiscal year 2024/2025, $918 million) fund comprehensive transmission and distribution technology solutions that will mitigate multiple hazards across a region or within a community.

- Hardening infrastructure with digitization and automation.
- Improving tools to restore power to the grid during outages.
- Investing in technologies to improve the efficiency of the grid, such as advanced conductoring and reconductoring.

**Topic Area 3: Grid Innovation Program** (fiscal year 2024/2025, $1.82 billion) provides financial assistance to one or multiple states, Tribes, local governments, and public utility commissions to collaborate with electric grid owners and operators to deploy projects that use innovative approaches to transmission, storage, and distribution infrastructure to enhance grid resilience and reliability. Selections in this program through today’s Funding Opportunity Announcement (FOA) will include transmission projects to support remote clean energy generation, improve interregional interconnection, and that use innovative technologies or execution approaches. The program will also prioritize projects that provide scalability, replicability, and innovation in the distribution space like district electrification, grid and resilience services from distributed energy resources, and battery energy storage systems.
Fiscal Year 2024/2025 GRIP Grant Application Timeline

- **Project Scoping and Planning** (18 Business Days)
  - February 5th: Preliminary Content Development
  - February 29th: DOE 'Encourage to Apply'

- **Application Development** (20 Business Days)
  - March 27th: Application Complete

- **Formatting, Graphics and Quality Control** (13 Business Days)
  - April 15th: Application Submission
GRIP Topic Area 1 Application Focus: Clean PowerCity Pathways

**Innovation and Enhancing Grid Resilience**

- Design and construction of the El Rio Substation
- Elverta substation rebuild
- Upgrade distribution network near Sacramento Airport

**Community Benefit**

- Curricula Build and Training (Sac State, Los Rios Colleges)
- Neighborhood Electrification (North Sacramento Area)
- Community Resilience Centers including Grant High School

**Summary**

- 5-year execution (2025-2030)
- $100 million grant request from Department of Energy (DOE)
- $200 million total project cost (50% match)
GRIP Topic Area 1 Application Focus: Clean PowerCity Pathways

Del Paso Heights Resiliency Center (Grant High School)

El Rio Substation Upgrade

Existing Infrastructure

New 69 kV Line

Neighborhood Electrification (Up to 500 homes)

Distribution Substation 1

Distribution Substation 2

Distribution Substation 3

New 69 kV Line

New Dist. Sub.

New 69 kV Line

New Dist. Sub.

New 69 kV Line

New Dist. Sub.

Sacramento Intl. Airport

Data Centers

Metro Air Park Area

Interstate Fleet EV Charging

March 19, 2024

Board Finance & Audit Committee and Special SMUD Board of Directors Meeting
GRIP Topic Area 3 Application Focus: Reimagining Thermal Resource Operation: Fleets in Transition (RETROFIT)

Summary
• 8-year execution (2025-2032)
• $250 million grant request from Department of Energy (DOE)
• $520 million total project cost (54% match)

Bulk Electric System
- Operational flexibility – Carson & Cosumnes
- Streamlined transmission permitting study

Bridging the gap
- 75 MW Energy Storage System at McClellan
- Transmission-Distribution Operations Coordination

Distribution System
- Residential battery Virtual Power Plant - 10,000 customers
- Interconnection upgrade for battery innovation site (Power Academy)

• Home electrification & battery backup targeting communities adjacent to thermal plants
• Customer battery installation & interconnection training & workforce development
• Utility battery training for safety, installation, and workforce development