

Exhibit to Agenda Item #1

- a. Brief Board and review timeline for rate design recommendations for **Net Energy Metering (NEM) Successor Rate**.
- b. Discuss, with possible amendment, **Strategic Direction SD-2, Competitive Rates** to address Distributed Energy Resources (DER) and customers as prosumers

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, November 18, 2020, scheduled to begin at 5:30 p.m.

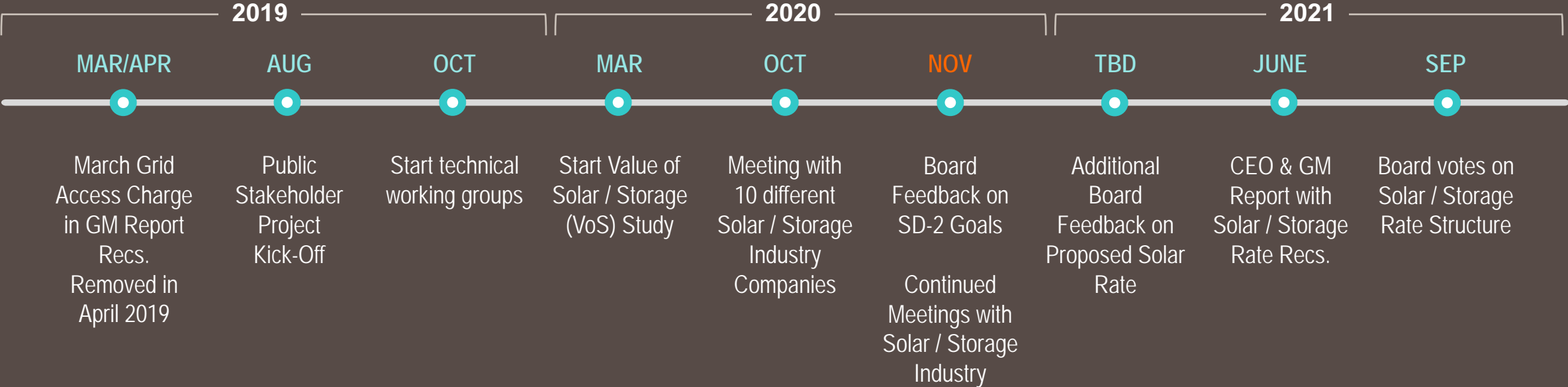
Virtual Meeting (online)

Agenda

Today's Meeting Purpose:

- Engage the Board to Provide Guidance on Strategic Direction-2 (SD-2) for Solar Rate Design and Future Distributed Energy Resources (DER) Rate Design
 - Review Timeline of Solar/Storage Rate Design Recommendations
 - SD-2 Review
 - Determine if the Board chooses to make changes to SD-2

Timeline of Successor Rate Process



Background Information

- NEM rate implemented in 1997 to encourage adoption of solar
 - In 1996, NEM1.0 became a legislative mandate that provided retail credits to customers with on-site renewable generation
- SMUD met the legislative goal of 150MW of solar in 2017
 - Currently 31K NEM customers (1k of EAPR customers) for a total of 221MW; growing at ~6,000 customers per year
- Best Current Estimate: Integrated Resource Plan shows an additional 390 MW of rooftop solar projected by 2040
 - Total of estimated 611MWs of Behind the Meter Rooftop solar by 2040
 - Approximate average of 20MWs annual adoption over the next 10 years in the Integrated Resource Plan projection
- SMUD's cost to purchase energy from rooftop solar is ~12¢/kWh vs. utility scale solar at ~4¢/kWh

Background Information

- California's Building Standards require the use of solar on all new home construction in the form of either rooftop solar or community solar
- SMUD's current NEM1.0 creates benefit for solar customers who produce their own power. The exported electricity is credited at retail rates. The credit may be used to offset any electricity charges, regardless when those charges occur
- CPUC has recognized the cost shift and the need to reduce the NEM compensation for IOUs
 - CPUC adopted NEM 2.0 in 2016 and IOUs implemented in 2017; Proceedings underway for NEM 3.0
- To date, SMUD has invested \$250M in solar through SB1 incentives and NEM1.0 compensation

Staff Needs Additional Guidance on SD-2

Current Technology and Customer Options have greatly expanded since SD-2 development

- Two-way energy flow and reliance on the grid to support these new technologies

Revenue Collection and Pricing

- 70% of SMUD's fixed costs are currently collected in variable energy revenue charge
- Due to technology and 2-way energy flow, need to find an equitable way to collect revenue to support the use of the grid while optimizing and incenting our customers' investments in rooftop solar and other DERs

Pricing strategies influence and support our achievement of the Board's goals

Current SD-2

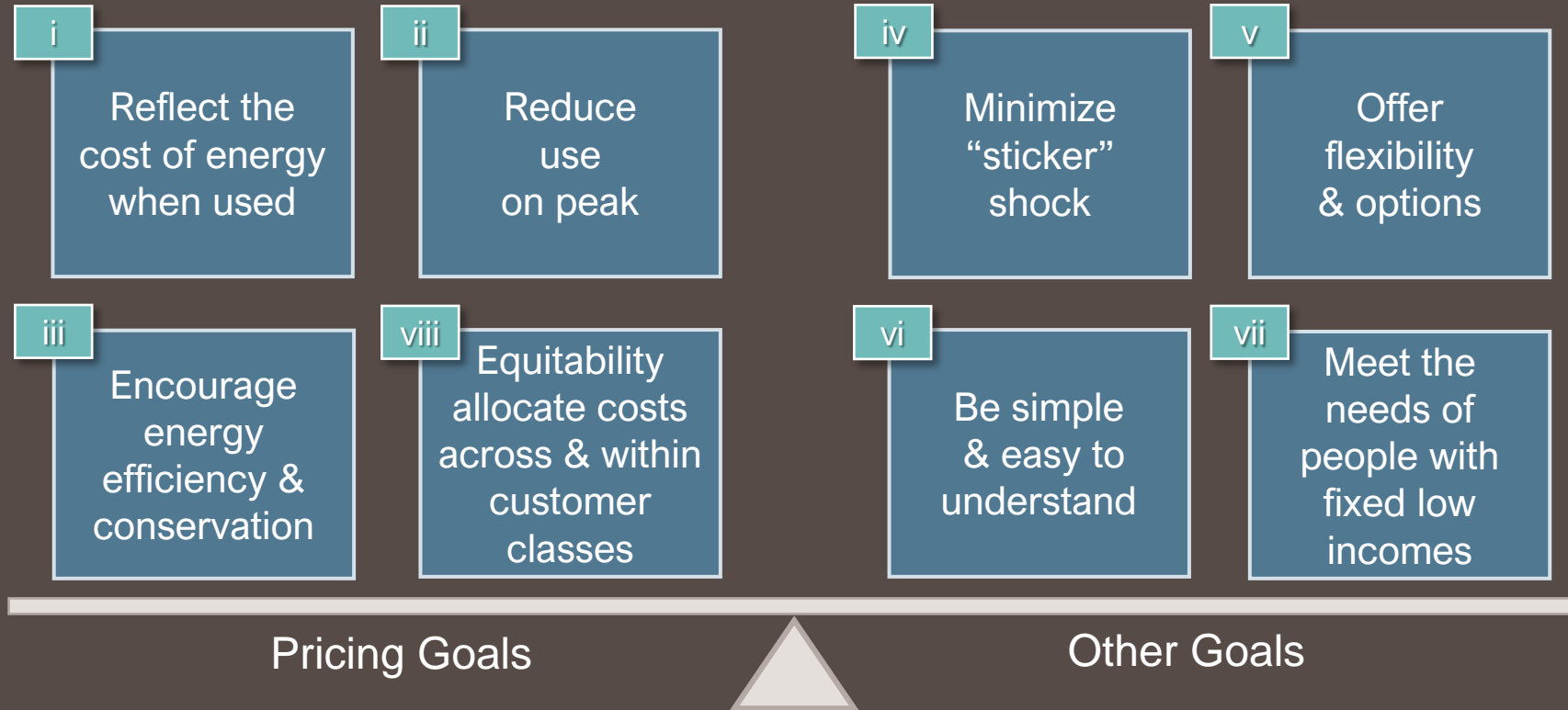
Maintaining competitive rates is a core value of the District.

Therefore:

- a. The Board establishes a rate target of 18 percent below Pacific Gas & Electric Company's published rates on a system average basis. In addition, the Board establishes a rate target of at least 10 percent below PG&E's published rates for each customer class.*
- b. SMUD's rate of change for both rates and bills shall be competitive with other local utilities on a system average basis.*

Current SD-2 cont.

In addition, SMUD's rates shall be designed to balance and achieve the following goals:



SD-2 provides Staff with guidelines in designing a successor rate / programs

Overview of Requested Guidance

- Staff believes additional guidance needed on 2 of the 8 goals contained in SD-2, in light of the two-way energy flow, new technology, and customers' new role as a “prosumer”
 - *Reflect the cost of energy when it is used*
 - *Encourage energy efficiency and conservation*

SD-2 Goal • i

Existing:

- *Reflect the cost of energy when it is used*

Staff Recommendation:

- Reflect the cost of energy when it is used or exported

SD-2 Goal • ii

Existing:

- *Reduce use on peak*

Staff Recommendation:

- Retain existing language

SD-2 Goal • iii

Existing:

- *Encourage energy efficiency and conservation*

Staff Recommendation:

- Encourage cost effective Distributed Energy Resources (DER) adoption while continuing to encourage energy efficiency, conservation, carbon reduction and electrification.

SD-2 Goal • iv

Existing:

- *Minimize "sticker" shock in the transition from one rate design to another*

Staff Recommendation:

- Retain existing language

SD-2 Goal • v

Existing:

- *Offer flexibility and options*

Staff Recommendation:

- Retain existing language

SD-2 Goal • vi

Existing:

- *Be simple and easy to understand*

Staff Recommendation:

- Retain existing language

SD-2 Goal • vii

Existing:

- *Meet the needs of people with fixed low incomes and severe medical conditions*

Staff Recommendation:

- Retain existing language

SD-2 Goal • viii

Existing:

- *Equitably allocate costs across and within customer classes*

Staff Recommendation:

- Retain existing language

Societal Benefits

Does the Board want staff to recommend inclusion of any additional amount in the new solar rate for societal benefits?

Societal benefits could include:

