

Exhibit to Agenda Item #2

Board Policy Committee and Special SMUD Board of Directors Meeting
Wednesday, September 19, 2018, scheduled to begin at 5:30 p.m.
Customer Service Center, Rubicon Room

SD-9 Background Information

- SD-9 compliance report addresses the following goals and objectives:
 - Greenhouse gas (GHG) targets and goals
 - Energy efficiency (EE) savings
 - Renewable goals (RPS), local and regional environmental benefits
 - Cost effective, clean distributed generation (DG) and storage
- SMUD is exploring new environmental goals with its Board as part of its 2018 Integrated Resource Plan
 - Board will approve the long-term IRP in advance of filing with the CEC in April 2019
 - SD9 will be updated with new environmental objectives after the IRP is approved by the Board

GHG Targets and Goals

2017 Performance

2017 SD-9 Carbon Footprint & Near-term Targets ¹	
Source	CO2e Emissions (MT)
SMUD Carbon Obligation ²	1,876,747
Adjustments ³	(97,523)
2017 SMUD Adjusted Emissions Total	1,779,224
<i>2020 Target</i>	<i>2,318,000</i>

¹ SMUD's thermal power plants and other major emissions sources have been verified by an independent third party.

² Net of Wholesale Sales.

³ Adjustments for Load, Wind, Hydro, and REC Banking.

2017 emissions out-performed 2020 GHG emissions targets due to an abundance of low-cost, low-carbon market power from the Northwest which SMUD aggressively pursued when available. It is expected that 2018 emissions will show a similar trend, however, it is uncertain if these short term contracts will be available in 2019 and beyond.

2017 Energy Efficiency Performance

Program Type	Energy Savings (Annual GWh)
Information & Education Savings	15.0
Existing Residential	51.9
Existing Commercial	54.0
New Construction	9.9
Shade Trees	0.4
Codes & Standards	33.0
Total	164.2
SD-9 Goals for 2017	158.0

Renewable Goals & Benefits

2017 Renewable Performance

Program	2017 Goal	2017 Net Procurement	Surplus Applied	Total 2017 RPS Compliance	2018 Goal	2020 Target
RPS	27%	17.9%	9.1%	27%	29%	33%
RPS (GWh)	2,854	1,888	966	2,854	3,000 (est.)	3,300 (est.)

- SMUD met its RPS requirements for 2017
- SMUD is on path to achieve the SD-9 2020 Renewable goal of 33% as well as the RPS requirements for Compliance Period 3 (2017-2020)
- The following committed projects will help SMUD achieve the 2020 RPS goal:

Committed Renewable Additions	Year	MW
Geothermal Contract	2017	10 to 30
Solar PV Contract	2017	60
Biomass Contract (SB859)	2018	7
Small Hydroelectric Project	2019	3
Wind Contract	2019	200
Solar PV Project	2021	140
Solar PV Project	2022	100

Promote Cost Effective Clean DG & Storage

Distributed Solar PV	Residential		Commercial Retrofit		Totals	
	Installed Systems	MW	Installed Systems	MW	Installed Systems	MW
Total through 2016	13,878	62.0	244	51.4	14,122	113.4
2017	96	0.5	20	13.3	116	13.8
Total MW Installed through the end of 2017						127.2

- SB1 Funding – Budgeted funds for residential and commercial installations have been fully committed
 - The 125 MW goal was achieved in 2017
- Energy Storage Goal – As a result of its 2017 evaluation of energy storage as required by AB2514, SMUD set a distributed energy storage procurement target of 9 MW by the end of 2020

Conclusion

- SMUD is in compliance with SD-9.
 - SMUD is on track to be below its 2020 GHG emission goal of 2.3 million metric tons.
 - SMUD satisfied its 2017 energy efficiency goals.
 - SMUD met the state's 2017 RPS goal of 27% and is on path to meet the 2020 RPS target.
 - DG and energy storage continue to expand in SMUD's service territory:
 - Customer solar PV installations encouraged by SB1 incentives.
 - SMUD's Board-adopted distributed energy storage procurement goal of 9 MW by the end of 2020.