

# Exhibit to Agenda Item #4

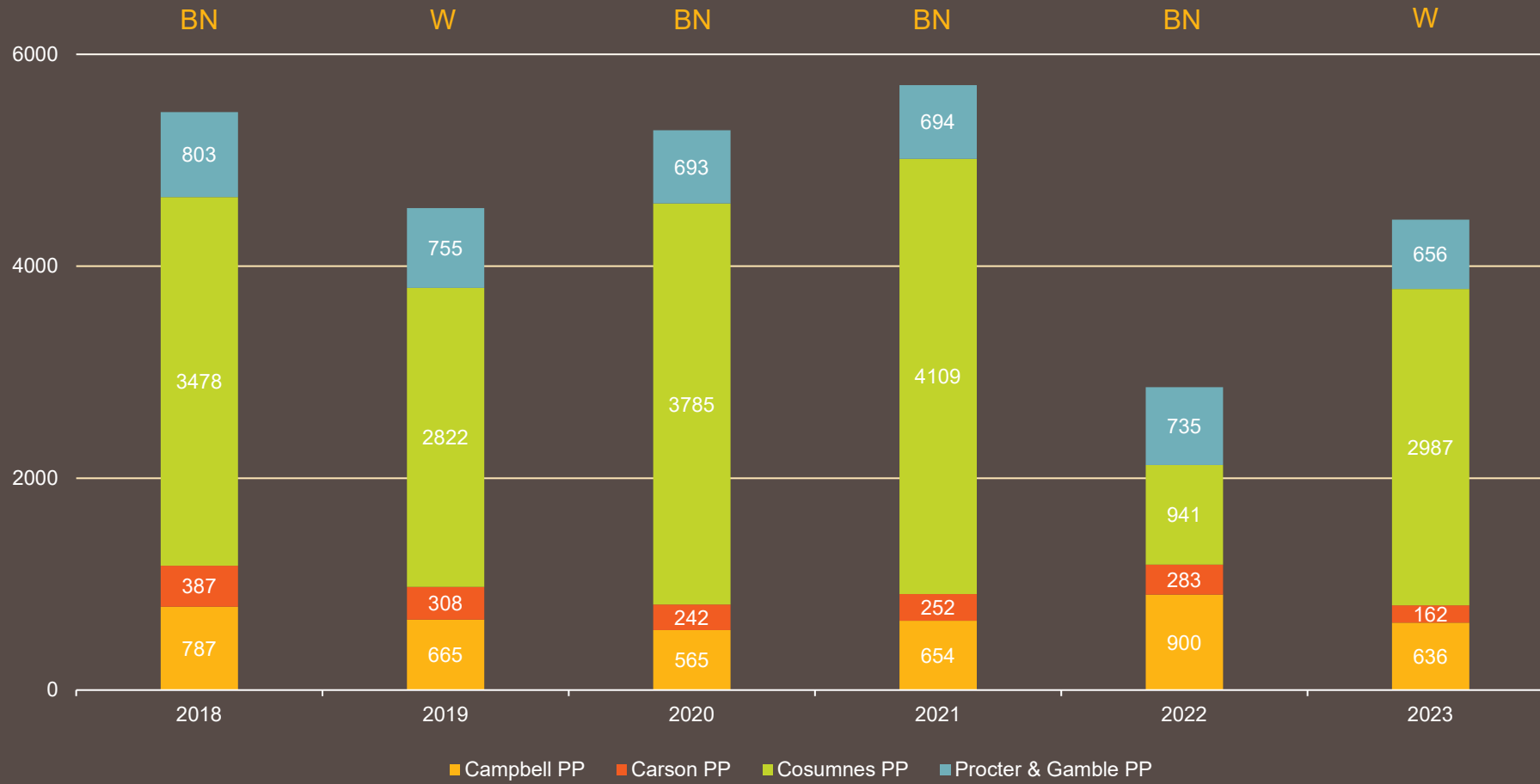
Review of activities and performance for **SFA** during the 2023 calendar year.

Joint Annual Meetings of the Joint Powers Agencies (JPAs)

Thursday, April 18, 2024, immediately following the SMUD Board of Directors Meeting scheduled to begin at 6:00 p.m.

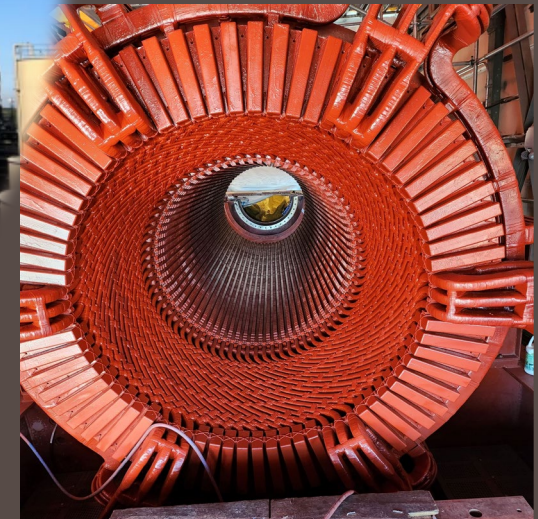
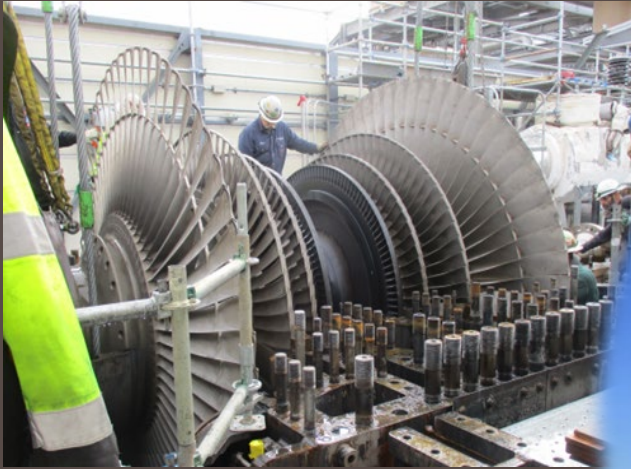
SMUD Headquarters Building, Auditorium

# Annual SMUD Thermal Load (Gigawatt hours)



Water Year: BN = Below Normal, W = Wet

# SFA -- Cosumnes Power Plant (CPP)



# SFA Cosumnes Power Plant (CPP)

- 602 MW Combined Cycle 2x1 facility
  - 2 General Electric (GE) Frame 7FA Gas Turbines (7241FA)
  - Mitsubishi Steam Turbine
- Operated by EthosEnergy Power Plant Services

# SFA Cosumnes Power Plant (CPP)

## Operational Performance Data:

	2022	2023
Equivalent Forced Outage Factor (EFOF)	19.38%	0.78%
IEEE* Equivalent Availability (online or ready to run)	44.50%	77.80%
Gross Capacity Factor (based on 602 MW)	17.90%	56.90%

*\*Institute of Electrical and Electronics Engineers*

- ❑ There were no lost time or California Occupational Safety and Health Administration (OSHA)-recordable injuries at the Cosumnes Power Plant during 2023.
- ❑ All regulatory requirements were satisfactorily met during 2023.
- ❑ The plant completed STG Stator repair and CT#2 Major overhaul.

# SFA -- Cosumnes Power Plant (CPP)



# SFA -- Cosumnes Power Plant (CPP)



# SFA – Campbell Power Plant (CSG)





# SFA – Campbell Power Plant (CSG)

- 160 MW Combined Cycle 1x1 facility
  - Siemens industrial frame gas turbine (V84.2)
  - Westinghouse Steam Turbine (ENK90)
- Operated by EthosEnergy Power Plant Services

# SFA – Campbell Power Plant (CSG)

<b>Operational Performance Data:</b>	<b>2022</b>	<b>2023</b>
Equivalent Forced Outage Factor (EFOF)	0.10%	0.10%
IEEE* Equivalent Availability (online or ready to run)	94.34%	80.20%
Gross Capacity Factor (based on 159.8 MW )	65.90%	45.34%

*\*Institute of Electrical and Electronics Engineers*

- There were no lost time or California Occupational Safety and Health Administration (OSHA) – recordable injuries at Campbell.
- All regulatory requirements were satisfactorily met during 2023.
- The plant completed a Major CTG Overhaul.

# SFA – Campbell Power Plant (CSG)



# SFA – Procter & Gamble Power Plant (PGG)



# SFA – Procter & Gamble Power Plant (PGG)

- 164.3 MW Combined Cycle 2x1 plus peaking unit facility
  - 120.3 MW Combined Cycle
  - 44 MW Simple Cycle Peaking Unit
  - 3 General Electric (GE) Aero Gas Turbines (LM6000)
  - 1 General Electric (GE) Steam Turbine
- 2 Auxiliary Boilers
- Operated by EthosEnergy Power Plant Services
- Steam Sales Agreement (Extended through 2028):

# SFA – Procter & Gamble Power Plant (PGG)

<b>Operational Performance Data:</b>	<b>2022</b>	<b>2023</b>
Equivalent Forced Outage Factor (EFOF)	0.97%	0.17%
IEEE* Equivalent Availability (online or ready to run)	94.29%	92.73%
Combined Cycle Gross Capacity Factor (based on 120.3 MW)	70.40%	59.81%
Peaker Gross Capacity Factor (based on 44 MW)	05.17%	04.56%

*\*Institute of Electrical and Electronics Engineers*

- ❑ There was 1 lost time or California Occupational Safety and Health Administration (OSHA)-recordable injuries at Procter & Gamble Power Plant during 2023.
- ❑ All permit and regulatory requirements were satisfactorily met during 2023.
- ❑ *Spare unit came back from major overhaul in 2023*

# SFA – Procter & Gamble Power Plant (PGG)



# SFA – Carson Power Plant (CIG)





# SFA – Carson Power Plant (CIG)

- 99.9 MW Combined cycle 1x1 facility plus peaking unit
  - 57.4 MW Cogeneration
  - 42.5 MW Simple Cycle Peaking Unit
  - 2 General Electric (GE) Aero Gas Turbines (LM6000)
  - 1 Siemens Steam Turbine
- 2 Auxiliary boilers
- Operated by EthosEnergy Power Plant Services
- Commodities Agreement (expires in 2025)

# SFA – Carson Power Plant (CIG)

<b>Operational Performance Data:</b>	<b>2022</b>	<b>2023</b>
Equivalent Forced Outage Factor (EFOF)	0.14%	5.88%
IEEE* Equivalent Availability (online or ready to run)	90.52%	82.44%
Combined Cycle Gross Capacity Factor (based on 57.4 MW)	43.40%	31.20%
Peaker Gross Capacity Factor (based on 42.5 MW)	2.24%	1.40%

*\*Institute of Electrical and Electronics Engineers*

- There were no lost time or California Occupational Safety and Health Administration (OSHA)-recordable injuries at the Carson Cogeneration Project during 2023.
- All regulatory requirements were satisfactorily met during 2023.
- In October during an inspection of the STG turbine, stage 13 blade liberation was discovered.

# SFA – Carson Power Plant (CIG)



# SFA –McClellan Power Plant (MCC)



# SFA –McClellan Power Plant (MCC)

- 72 MW Simple Cycle Peaking Unit
  - General Electric (GE) industrial frame gas turbine (Frame 7E)
- Operated by EthosEnergy Power Plant Services

# SFA –McClellan Power Plant (MCC)

## Operational Performance Data:

	2022	2023
Equivalent Forced Outage Factor (EFOF)	0.79%	0.35%
IEEE* Equivalent Availability (online or ready to run)	95.39%	97.27%
Gross Capacity Factor (based on 72 MW )	0.58%	0.40%

*\*Institute of Electrical and Electronics Engineers*

- ❑ There were no lost time or California Occupational Safety and Health Administration (OSHA) – recordable injuries at McClellan during 2023.
- ❑ All regulatory requirements were satisfactorily met during 2023.