

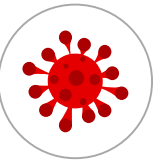
Exhibit to Agenda Item # 7

Provide the Board with a briefing on COVID-19 operational and financial impacts to customers, employees, and operations, and an update on actions taken.

Board of Directors Meeting

Thursday, April 16, 2020, scheduled to begin at 5:30 p.m.

Agenda



1 Early monitoring and preparation for COVID-19

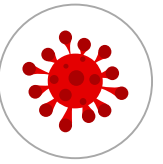
2 Overview of COVID-19 impacts

3 Three pillars of response effort
Employees · Operations · Customers

4 Financial impacts
Assumptions & modeling · Decisions to date

5 Next steps

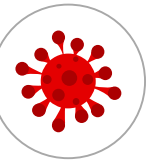
Early monitoring and preparation for COVID-19: SMUD



SMUD, like other utilities, is well prepared for unplanned events that impact our operations. Specifically for COVID-19:

- Safety is always SMUD's priority. Rigorous risk mitigation measures in place for employees in all aspects of our operations.
- Ongoing integrated and robust planning for wide range of major events
 - Business Continuity
 - Emergency Management
 - Disaster Recovery
 - Crisis Communications
- Regular scenario exercises: internally and with external jurisdictions and partners
- Strong financial management
- Cross-department COVID-19 team began meeting in January for monitoring and response preparedness
- Engaged senior leadership team early to ensure plans in place to support operations, employees and our customers
- Social distancing plans developed and implemented early

We've all seen the headlines



6:42

THE WALL STREET JOURNAL AA

BUSINESS

America's Make-or-Break Week

The bills are now coming due for big companies and millions of laid-off workers. Decisions made in the next few days will shape how coronavirus impacts the economy.

LIVE UPDATES

Coronavirus pandemic alters life as we know it

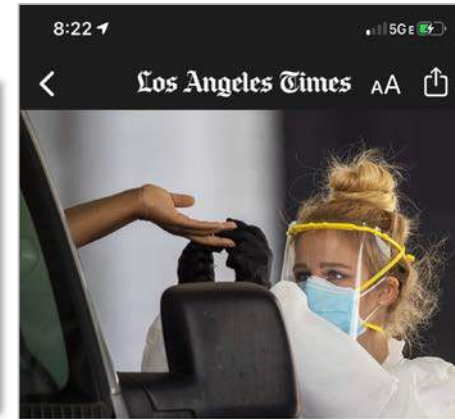
By Amy Woodyatt, Julia Hollingsworth, Ben Westcott, Adam Renton, Meg Wagner and Mike Hayes, CNN
Updated 10:13 a.m. ET, March 30, 2020



Cowgirl restaurant in New York, closed during



Macy's will furlough the majority of its 125,000 employees



A healthcare worker tends to a driver at a drive-through coronavirus testing site at the Westminster Mall. (Allen J. Schaben / Los Angeles Times)

'A silent explosion': Coronavirus deaths in U.S. climb past 16,000

COVID-19 deaths in the U.S. surpass 16,000. In New York, new hospitalizations slow, affirming signs that stay-at-home orders are slowing coronavirus spread

1:05

THE WALL STREET JOURNAL AA

China Gets Back to Work While U.S. Extends Coronavirus Shutdowns

Confirmed cases of Covid-19 rise to more than 735,000 globally, and deaths top 34,000

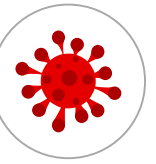


Students went back to school in China's Jiangsu province on Monday after a long delay due to the coronavirus pandemic. CREDIT: STR/AGENCE FRANCE-PRESSE-GETTY IMAGES

By Chong Koh Ping and Ann

'We Have Lost It All': The Shock Felt by Millions of Unemployed Americans

COVID-19 impacts



BUSINESS
INSIDER

Electricity use in the US has plummeted more over the past 3 weeks than it did during the entire 2008 recession — and economists say that's a more timely picture of this downturn's true impact

Reported impacts

- Across Europe, electricity sales down 4-16%
- New York reporting electricity sales decrease
- LPPC CEOs using 5-15% drop in load as “most likely” case
- **SMUD** – current forecast reflects experience equal to low-to-mid range of both Europe and other large public power – though very limited data
- **SMUD** – anticipating 3% system load reduction on weekends and 7% reduction on weekdays.

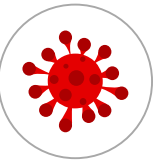
The New York Times

Another Way to See the Recession: Power Usage Is Way Down

By [Quoctrung Bui](#) and Justin Wolfers April 8, 2020

When the economy is moving too fast for the usual indicators, the electricity grid offers a valuable clue.

COVID-19 impacts are profound



COVID-19 is hurting our customers

- Commercial customers are shutting down and we don't know for how long.
- Small and medium business customers are disproportionately impacted.
- Customers' ability to pay their SMUD bills will be impacted.



Weekly unemployment claims

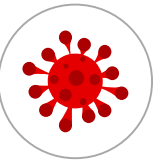
- US: 6.6m week ending April 4. 16.8m in three weeks
- CA: 1.06m week ending April 8. 2.17m in three weeks



University of the Pacific unemployment study estimates

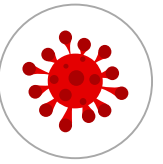
- CA unemployment: 18.8% by May
- Sacramento unemployment: 18.5% by May

COVID-19 Impacts vs. a Typical Recession



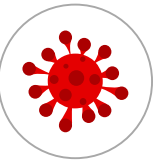
- COVID-19 is different from previous recessions
- Sharp immediate decline with no warning signals
- Initial forecast was for a quick recovery; now less certain and many varied outlooks. Latest forecasts show economic conditions worsening and impact into 2022.
- **Sacramento Unemployment:** Great Recession 12.9%; **May 2020 Forecast 18.5%**
- **California Unemployment: Forecast 8.5% in early 2022.**
- There is uncertainty about how long and how large additional impacts may be:
 - Length of shelter-in-place orders
 - Ability for businesses to recover once shelter order rescinded
 - Overall economy: recession anticipated for 2020-2021 and into 2022

Economic outlook



	Headwinds	Tailwinds
Federal	<ul style="list-style-type: none">• Up to 20% unemployment (37m jobs vulnerable)• Up to 50% drop in GDP – St. Louis Fed• 0.4% GDP drop, recovery mid-2022 – UCLA• Additional states and cities to exceed hospital capacity in next few weeks.	<ul style="list-style-type: none">• \$8b emergency health care supplement• \$100b paid sick leave and unemployment• Fed action to support functioning markets with liquidity and stability• \$2.2t in stimulus support, unemployment benefits
State	<ul style="list-style-type: none">• Statewide “Shelter in Place”• Schools closed through August/September• Continued daily new case identification and death counts	<ul style="list-style-type: none">• Federal disaster declaration creates opportunity for potential FEMA reimbursement – significant lag time• EDD unemployment benefits increased (additional \$600 per week to July 31, 2020 and waiting period waived)
Local	<ul style="list-style-type: none">• Closure of key accounts (Huhtamaki and Kikkoman so far)• Closure of arenas and theatres• Closure of many small businesses	<ul style="list-style-type: none">• Availability of small business loans.• Sacramento COVID-19 response fund (Donate4Sacramento) surpassed \$1m to support local families, nonprofits and small businesses

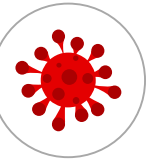
Early Proactive Response: Operations



FEB 26	Emergency Operations Center (EOC) activated February 26: Level 1 (partial activation, remote only, minimal staff)
MAR 13	EOC elevated to Level 2 on March 13 (partial activation, remote, higher staffing level)
MAR 17	EOC elevated to Level 3 on March 17 (full activation, physically staffing EOC, Monday to Friday, with remote option)
DAILY	Executive team meeting daily to assess situation and evolving information, make decisions and pivot as necessary
DAILY	Executives meeting with their leadership teams daily
DAILY	Temperature screening before entering SMUD buildings or jobsite

Early and aggressive social distancing strategy
• Suspended travel
• Meeting restrictions
• Suspended participation in community events
• Split crews
• Staggered start times
• Split 24/7 onsite staff between multiple locations
• Support for maximizing social distancing and minimizing risks for field staff
• Temporary campus closure
• Remote work where possible
• Sequestration in place for some work groups starting April 16

Proactive response: Supporting employees



- COVID-19 Paid Leave program
- COVID-19 resource and update website for employees
- Daily email updates with program information and user-generated content to keep employees connected
- Tailored communications for field employees
- Shared resource program
- Leave donation program (in development)
- Care and Connect program for sequestered employees

SMUD COVID-19 Employee Update
April 7, 2020

SharePoint Resource site
Coronavirus updates

Staying safe and well
Don't forget your mental health.

While much of the focus on COVID-19 is appropriately focused on keeping ourselves and others physically safe and healthy, with all of the changes and disruptions we've experienced in the past several weeks, there are ways to support our mental health as well.

New information today

- Sacramento County extends shelter in place order

This afternoon Sacramento County issued a Public Health Order directing all individuals to stay home and extending to May 1, 2020, the terms of the order to increase social distancing and reducing person-to-person contact to further slow transmission of COVID-19.

The new Public Health Order has further clarifications and limitations from the previous Order. Those include:

- Requiring essential businesses to implement social distancing protocols.
- Restricting access to recreation facilities.
- Clarifying essential activities and essential travel.
- Clarifying and limiting essential business activities.
- Directing all businesses and government agencies to cease non-essential operations at physical locations in the County.
- Prohibiting all non-essential gatherings of any number of individuals.
- Continuing to exempt individuals experiencing homelessness from the order but urging them to find shelter and government agencies to provide it.

• **SMUD COVID-19 exposure guidelines**

Fortunately, we haven't had any reports of employees testing positive for COVID-19, but as the number of confirmed cases locally grows, the risk of exposure does too.

SMUD's Integrated Disability Management (IDM) team has responsibility for addressing all COVID-19 related issues for a variety of scenarios, including when an employee has been exposed to others infected or potentially infected with COVID-19.

COVID-19 Response

Latest updates

- New COVID-19 updates
- Stay safe
- Working safely

Working safely

- Stay safe
- Working safely

Resources for emergency life

- Stay safe
- Working safely

My documents

- COVID-19 updates
- Stay safe
- Working safely

Stay safe

- Working safely

Working safely

- Stay safe

Resources for emergency life

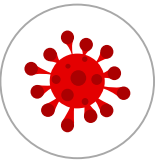
- Stay safe

Care & Connect Program

Keeping Lights On, Connections Strong

SMUD

Supporting customers



Suspended disconnection of power due to non-payment for residential and commercial customers

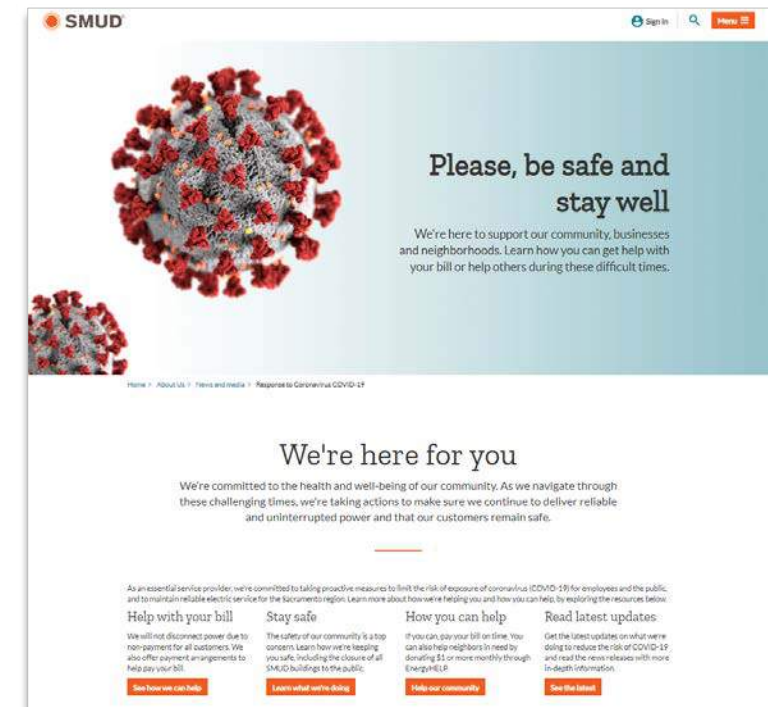
Easier to apply for Energy Assistance Program Rate (EAPR), including changes to income qualification

Paused the recertification process for EAPR and MEDRate customers

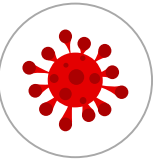
Dedicated webpage with updates and resources for residential and business customers. smud.org/coronavirus

Energy Specialists working remotely, engaging with customers and using energy usage and bill data to provide customized education and prioritize for weatherization, energy efficiency and electrification work once we're able to return to the field

Working with nonprofit partners to determine how to support them in their time of need



Supporting customers: Communications



Outreach to customers in multiple channels with information and tools to support them during the pandemic.

Integrated “Stay Well” marketing campaign. Print, billboards and radio began March 16. New TV campaign started April 13.

Supporting messaging in email, social media and print.

Emails to residential and commercial customers. Strong open rate of 43%, compared to SMUD average of 23%.

Strong engagement in other digital channels. smud.org web traffic is up 6% since February 28, with 9% of traffic coming from new visitors.

smud.org/coronavirus page has received 11,000+ views since published March 13.

Three videos for social media featuring SMUD field employees to remind the public to practice social distancing around our crews.



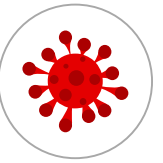
We're grateful to our crews for keeping our community safe and providing vital service during this time. If you see our teams out, thank them from afar with a thumbs up, a wave, or a shout on social media. Learn more at smud.org/coronavirus #socialdistancing #publicpower

SMUD
Public Utility Company [Learn More](#)

Like Comment Share

Sandy Fuller and 65 others

What our customers are telling us



7% of customers say they're very unlikely to be able to pay next month's utility bill.

70% of SMUD commercial customer respondents feel their financial situation will be slightly to much worse in the next two months.

56% of SMUD residential customers say they are using more electricity.

60% of SMUD commercial customers expect to use somewhat less to a lot less electricity.

68% of SMUD residential customers feel SMUD is prepared to continue providing reliable power during the current situation.

76% of SMUD residential customers state they are aware of seeing communications from SMUD on not shutting of power for non-payment.

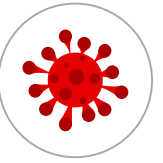
The screenshot shows a webpage titled "Helping during the COVID-19 pandemic" with the SMUD logo and a URL <https://www.smud.org/>. The main heading is "We're here for you" with a sub-heading "We're committed to the health and well-being of our community. As we navigate through these challenging times, we're taking actions to make sure we continue to deliver reliable and uninterrupted power and that our customers remain safe." Below this are three columns: "Get help with your bill" (We will not disconnect power due to non-payment for all customers. We also offer payment arrangements to help pay your bill. See how we can help), "Stay safe" (The safety of our community is a top concern. Learn how we're keeping you safe, including the closure of all SMUD buildings to the public. Learn what we're doing), and "Read latest updates" (Get the latest updates on what we're doing to reduce the risk of COVID-19 and read the news releases with more in-depth information. See the latest). The J.D. POWER logo is visible at the bottom left, and small text at the bottom right reads "© 2020 Electric Utility Residential Customer Satisfaction Study".

J.D. POWER

J.D. Power shared SMUD's COVID-19 web page and customer communications as one of a small handful of examples of utilities that are responding well to the COVID-19 issue in a webinar to share results of its COVID-19 pulse survey in late March.

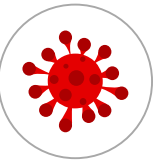


SMUD's financial reality before COVID-19



- At SMUD, cash is king
- Cash outflow is ~\$3m/day
- Cash inflows come from two main sources:
 1. Customer payments
 2. Financing
- Before COVID-19
 - Found \$28m of operational efficiencies. This is in our plan.
 - We were working on finding offsets to \$30m of unplanned, mandated wildfire costs (vegetation management)
- Post-COVID-19, revenue impacts will require us to increase borrowing in the short term

SMUD's new financial reality: What we're monitoring



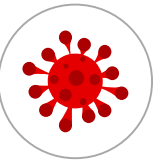
Load and electricity sales

- Temporary closure of many businesses
- Changes in commercial and residential load patterns
- System-wide we're seeing a 3% reduction on weekends and a 7% reduction on weekdays, based on early data
- We are continuing to monitor and refine load forecast based on latest data

Customer impacts and revenue

- Net decrease in revenue due to decrease in load (only partially offset by commodity reduction)
- Customers' abilities to pay their SMUD bills will be impacted by economic downturn and high unemployment, likely increasing write-offs and slowing the pace at which we collect revenue from our customers
- Delinquencies, collections, payment agreements, write-offs: Increase expected, but too early to know extent
- Longer term commercial customer impacts
- Bill payment cadence uncertain
- 2008 increases in delinquencies were very limited, but this was without suspended shutoffs, therefore no certainty about customer payment response
- Delayed payments can cause significant impact to days cash; anticipate initial one-time larger impact then ongoing drag on cash flow

SMUD's new financial reality: What we're monitoring



Increased costs

- Hard costs and indirect costs of transitioning to large remote workforce (1,400 working remotely, compared to 100 typically working from home on any given day)
- Additional safety measures, leave costs
- Sequestration costs: Salaries, stipends, accommodation (RV rental)

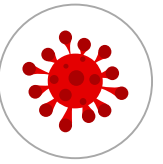
EAPR applications

- Number of applications holding steady, expect spike
- Higher unemployment, mostly (95%) lowest-paid workers, will drive continued increases
- Expecting rapid increase in number of EAPR customers, due to anticipated Sacramento rapid unemployment peak, unlike more gradual historical recessions

Supply Chain

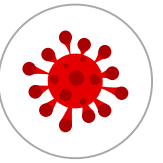
- Some vendors have invoked contractual arrangements to put SMUD on notice for potential interruptions to operations/service
- Continuing to monitor for supply chain disruptions
- Some commodity market counterparties are distressed and we're minimizing credit risk

Impact of sudden load drop



- Lower electricity sales (kWh) means lower revenue
 - Gross revenue loss for 2020: \$47m - \$68m
 - Gross revenue loss for 2021: \$67m - \$128m
- SMUD's commodity costs will decrease
- However, many of SMUD's business costs are fixed: poles and wires, wildfire vegetation management and insurance, accounting, billing, treasury, grid operations, cyber security, customer contact center, etc. – these costs all remain so we can keep the lights on
- If revenue doesn't cover these necessary fixed costs, we need to take action to keep SMUD financially healthy
- While SMUD is not-for-profit, we must still meet minimum financial metrics

Consolidated financial impact



Reduction ranges required		
	2020	2021
O&M	\$30m-\$40m	\$25m-\$75m
Capital/ Cash Balances	\$30m-\$45m	\$50m-\$100m

Expected Case

High degree of uncertainty for both years, greater uncertainty in 2021 and 2022

3-7% load drop for 2020 during shelter in place; recessionary load drop in 2020/2021/2022

Relaxing Fixed Charge and Days Cash for single year, then resume to current targets

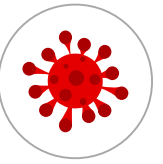
EAPR subsidy increases & additional write-offs

COVID-19 response is also increasing costs

Assumes borrowing available with low interest rates

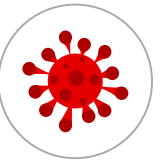
Additional cost reductions required if shelter-in-place is extended

Strong financial management is helping



- Proactive financial management means we're better positioned in times of crisis.
- Previous actions and financial stewardship have increased our financial strength:
 - Increased fixed charge from 1.50 to 1.70
 - Increased days cash from 100 to 130 to 150 days
 - Paid off debt of 2 thermal plants early
- Strong focus on Operational Excellence
 - \$28m in permanent annual savings reduced 2019 Rate Action by 2%
- While past decisions and focus give us more financial flexibility and help insulate us from some of the likely longer-term financial impacts from COVID-19, the situation is dynamic and there will be more difficult decisions needed
- SMUD's forward thinking on rate restructuring has helped: Fixed charge, Time-of-Day rates, EAPR restructure and the recently approved commercial rate restructure

Cost reduction decisions we've already made



O & M - 2020

- 3-month hiring freeze, longer if needed (\$1-2m)
- Reduce 2020 travel/training budget by (\$2m)
- Delay roll out of conference room technology to remaining rooms (\$300,000)
- Not seeking additional Community Choice Aggregation clients (\$3m upfront investment before revenue received)
- Shifted implementation of some energy efficiency efforts to further years (\$10m)
- Reduced R&D pilots and implementation (\$3m)
- **TOTAL Estimated \$20m**

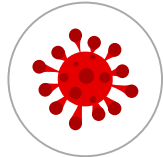
Capital / Cash Balances - 2020

- Delayed the supplemental \$9.5m payment to OPEB.
- Settle nuclear litigation
- Sell energy efficiency loan portfolio
- Delay infrastructure spending associated with economic expansion (\$15m)
- **TOTAL Estimated at least \$25m**

Other

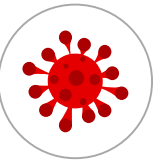
- Monitoring commodity trading partners – some are distressed – and defensively changing business relationship (buy-only, reducing unsecured credit)
- Monitoring interest rate markets for access to short-term commercial paper funding to bolster liquidity. Preparing to go to long-term debt market in late April as markets normalize.
- Relaxing key financial metrics to increase liquidity (reduces savings requirements \$50m capital).

2020 gaps



	Reduction range required	Savings identified	Gap
O&M	\$30m-\$40m	\$20m	\$10m-\$20m
Capital/Cash Reduction	\$30m-\$45m	\$25m	\$5m-\$20m

Will need to make more decisions



We're continuing to monitor SMUD data and other jurisdictions for changes and new information

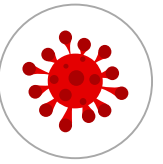
- Refine modeling, scenarios and finalize additional cost reductions based on data
 - Commodity markets, commodity counter parties and impacts to our commodity budget
 - Understand impacts to Sacramento businesses
 - Understand impacts to Commercial Development and our required capital investments to serve
 - Interest rates and short and long-term financing environment
 - Legislative and regulatory decisions – national, state and local
- Stress test scenarios to prepare us if conditions worsen



Additional action

- Majority of 2020 reductions are in place based on current forecast. Now focused on 2021 while continuing to look at 2020
- Review procurements for further prioritization and potential deferrals of non-critical spending
- Revise management's metrics to reflect critical operations, prioritization, financial health and meeting customer and community needs

May Board meeting



Update the Board
on COVID-19
financial and
operational impacts



Progress on
identifying cost
reductions for 2020
and 2021



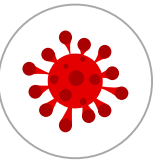
Identify impacts
to any of the
Board's Strategic
Directions



Possible discussion
of need to relax specific
Strategic Direction
metrics such as:

- SD-5 Customer Relations
- SD-9 Resource Planning
- SD-14 System Enhancement

COVID-19 In Summary



Foundational strengths

- Prepared operationally for COVID-19
- Financially strong
- Data analytics providing real time data to support timely quality decisions



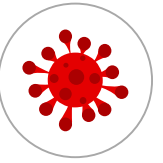
Clarity of information and taking action

- Steps already taken
- Cash focused



Planning for continued uncertainty

- Conservative approach with scenario planning and stress testing
- Controlling what we can control; mitigating what we can't control
- Staff and the Board will need to make tough decisions to navigate the crisis



Questions