Board Strategic Development Committee Meeting and Special Board of Directors Meeting

Date: Tuesday, September 7, 2021

Time: Scheduled to begin at 5:30 p.m.

Location: Virtual Meeting, Online





Powering forward. Together.

AGENDA BOARD STRATEGIC DEVELOPMENT COMMITTEE MEETING AND SPECIAL SMUD BOARD OF DIRECTORS MEETING

Tuesday, September 7, 2021 Scheduled to begin at 5:30 p.m.

Zoom Webinar Link: Join SMUD Strategic Development Committee Meeting Here

Webinar ID: 160 956 3219 Password: 819556 Phone Dial-in Number: 1-669-254-5252

In accordance with the Governor's Executive Order N-29-20 and the Emergency Board Meeting Procedures adopted by the SMUD Board of Directors, the regular Board meeting and other public meetings are closed to the public to align with state, local, and federal guidelines and social distancing recommendations for the containment of the coronavirus.

Live video streams and indexed archives of meetings are available at: http://smud.granicus.com/ViewPublisher.php?view_id=16

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by emailing a request to speak to <u>PublicComment@smud.org</u>. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. **Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.**

Members of the public may provide written public comments on a specific agenda item or on items not on the agenda (general public comment) by submitting comments via e-mail. Comments may be submitted to PublicComment@smud.org and will be placed into the record of the meeting.

Members of the public that are listening to or watching the live stream of a Committee meeting and wish to comment on a specific agenda item as it is being heard may submit their comments, limited to 250 words or less, to <u>PublicComment@smud.org</u>, noting the agenda item number in the subject line. The Committee Chair may read comments for items on the agenda into the record, in his discretion, based upon such factors as the length of the agenda or the number of e-mail comments received. General public comment for items not on the agenda will not be read into the record but will be provided to the Board and placed into the record of the Board meeting if it is received within two hours after the meeting ends.

This Committee meeting is noticed as a joint meeting with the Board of Directors for compliance with the Brown Act. In order to preserve the function of the Committee as advisory to the Board, members of the Board may attend and participate in the discussions, but no Board action will be taken. The Strategic Development Committee will review, discuss and provide the Committee's recommendation on the following:

INFORMATIONAL ITEMS

 1. Scott Martin
 Provide the Board with external and internal presentations followed by a panel discussion on the various carbon capture and sequestration (CCS) technologies, applications, policy, and SMUD's consideration of CCS in contributing to the achievement of the 2030 Zero Carbon Plan goals and objectives.

 Presenters and Panel Participants:

 Ross Gould, Director, Power Generation SMUD

 Dr. Abhoyjit S. Bhown, Program Manager, Advanced Generation & Carbon Capture and

Dr. Abhoyjit S. Bhown, Program Manager, Advanced Generation & Carbon Capture and Storage

ELECTRIC POWER RESEARCH INSTITUTE (EPRI)

Dr. Sarah Saltzer, Ph.D., Managing Director STANFORD CENTER FOR CARBON STORAGE

John Thompson, Technology and Markets Director CLEAN AIR TASK FORCE (CATF)

Presentation: 45 minutes Discussion: 30 minutes

- 2. Public Comment
- 3. Gregg Fishman Summary of Committee Direction. Discussion: 1 minute

Pursuant to Resolution No. 20-06-08 adopted on June 18, 2020, Emergency Board Meeting Procedures are in effect:

Members of the public may make either a general public comment or comment on a specific agenda item by submitting comments via email. Comments may be submitted to PublicComment@smud.org. Comments will be provided to the Board and placed into the record of the Committee meeting if it is received within two hours after the meeting ends.

Members of the public that are listening or watching the live stream of a Board meeting and wish to comment on a specific agenda item as it is being heard, may submit their comments, limited to 250 words or less, to PublicComment@smud.org. The Board Committee Chair may read the comments into the record, in his discretion, based upon such factors as the length of the agenda or the number of email comments received. Comments will be provided to the Board and placed into the record of the Committee meeting if it is received within two hours after the meeting ends.

Members of the public may register to provide verbal comments at an upcoming Board or Committee meeting by emailing a request to speak to <u>PublicComment@smud.org</u>. Please include the date of the meeting, name, and topic or agenda item the requestor wishes to speak on. The request may also be submitted while the meeting is in progress during the standard time for the agenda item or topic. **Pre-registration is strongly encouraged by no later than 3:00 p.m. on the day of the meeting.**

ADA Accessibility Procedures: Upon request, SMUD will generally provide appropriate aids and services leading to effective communication for qualified persons with disabilities so that they can participate equally in this virtual meeting. If you need a reasonable auxiliary aid or service for effective communication to participate, please email <u>Toni.Stelling@smud.org</u>, or contact by phone at (916) 732-7143, no later than 48 hours before this virtual meeting.

SSS No.

RS 21-006

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Strategic Development Committee, September 7, 2021 Board Meeting Date N/A

ТО								ТО								
1.	Scott Martin								-							
2.	Lora Angua	Lora Anguay											•			
3.	Gary King						8.									
4.	Frankie Mc			9.	Lega	l										
5.	-		10.	CEO	& (Genera	al N	Ianager								
Consent (Calendar		Yes	х	No If no, sc presentation	hedule a dry run 1.	Bud	udgeted X Yes No (If no, explain in Cost/Budgeted section.)						Budgeted		
FROM (IPR					DEPARTMENT			-			MAIL STOP	EXT.	DATE SENT			
Bryan S			Resource Strate									B205	5534	8/10/2021		
NARRATIVE: Requested Action: Provide the Board with external and internal presentations followed by a panel discussion with Q&											th Ole A on					
Kequ	the cor obj	the various carbon capture and sequestration (CCS) technologies, applications, policy, and SMUD's consideration of CCS in contributing to the achievement of the 2030 Zero Carbon Plan goals and objectives. Representatives from the Stanford Center for Carbon Storage, Clean Air Task Force (CATF), the Electric														
E (N	Pov reg CC : SD	Power Research Institute (EPRI), and SMUD will be presenting a panel discussion on September 7 th regarding CCS technology. The discussion will cover the technical and operational aspects of various CCS technologies, feasibility, and policy that may support growth in CCS interest and development. SD-4, Reliability; SD-9 Resource Planning; SD-10 Innovation														
Co	cur SM	Increase the Board's knowledge of CCS including available technologies, operational and use models, current technology status and scale, policy supporting technology growth, and how CCS could support SMUD's 2030 Zero Carbon objectives. This informational item has no direct budgetary impact.														
	: Do	Do not hold the panel discussion; receive an update via written report.														
Affe	Ent	Enterprise Strategy, Energy Delivery and Operations, Zero Carbon Energy Solutions														
C	Bo	Board Office, Executive Office, Enterprise Strategy and Zero Carbon Energy Solutions														
	Presenter	-Dı -Dı -Jo	 Presenters and Panel Participants: -Dr. Abhoyjit Bhown, Program Manager, Advanced Generation & Carbon Capture and Storage Electric Power Research Institute (EPRI) -Dr. Sarah Saltzer Ph.D., Managing Director Stanford Center for Carbon Storage -John Thompson, Technology and Markets Director Clean Air Task Force (CATF) -Ross Gould, Director, Power Generation SMUD 													

Additional Links:

SUBJECT

Carbon Capture and Sequestration Panel Discussion

ITEM NO. (FOR LEGAL USE ONLY)



Dr. Abhoyjit S. Bhown Program Manager Advanced Generation & Carbon Capture and Storage Electric Power Research Institute (EPRI)

Abhoyjit S. Bhown is the Program Manager for Advanced Generation & Carbon Capture and Storage at the Electric Power Research Institute in Palo Alto, California. He leads a group of engineers and scientists focused on carbon management for carbon-containing fuels focused on advanced power generation, carbon capture, and CO₂ storage. Much of his own work includes development of novel carbon capture technologies, assessment carbon capture technologies globally, and serving on multiple research advisory boards related to carbon capture at national labs, academia, and industrial organizations. He collaborates extensively governments, electricity generators, process developers, and academic organizations. He has 33 years' experience in development of separations technologies across the pharmaceutical and energy industries. He holds a B.S. from Auburn University in Alabama, M.S. from the University of California Davis, and a Ph.D. from the University of Minnesota, all in chemical engineering. He also holds a M.S. in mathematics from the University of Minnesota.



Dr. Sarah Saltzer Managing Director Sanford Center for Carbon Storage And the Carbon Removal Initiative

Dr. Sarah Saltzer is the Managing Director of the Stanford Center for Carbon Storage and the Stanford Carbon Removal Initiative. Sarah spent 25 years at Chevron where she held a series of scientific, managerial, and executive roles. She has a diversity of experience in positions of increasing responsibility, including geology research and teaching, petroleum engineering, leading exploration teams, competitor analysis and business planning, executive responsibilities for all business operations for Chevron's multi-national environmental remediation company, and responsibility for SECmandated reserves reporting for a quarter of the globe. Dr. Saltzer holds a M.S. and B.S. from the Massachusetts Institute of Technology and a Ph.D. from Stanford University.



John Thompson Technology and Markets Director Clean Air Task Force (CATF)

John Thompson promotes new technology and policy solutions to address climate change that emphasize carbon capture, utilization, and storage (CCUS). His current work focuses on policy design to overcome barriers facing carbon capture and sequestration. These include policies to develop new transformational carbon capture technologies and overcoming economic and infrastructure barriers that limit the application of CCUS in industry, power, and zero-carbon fuels markets.

John's past work includes facilitating technology transfer between U.S. and Chinese companies, using economic models to determine the impact of potential federal policies on CCUS deployment, and advocating federal regulatory policies that limit carbon dioxide emissions.

John is a frequent presenter on carbon capture and sequestration at conferences in the United States, China, and Europe. Since 2012, he has served on the National Coal Council, an advisory body to the Secretary of the Department of Energy.

John holds a B. S. in chemical engineering from the University of Illinois, Champaign-Urbana, as well as an M.B.A. from Olin School of Business at Washington University in Saint Louis.

Published Work:

<u>The New Economics of Carbon Capture: Lower Costs, More Revenue</u>

SSS No.

BOD 2021-005

BOARD AGENDA ITEM

STAFFING SUMMARY SHEET

Committee Meeting & Date Strategic Development 2021 Board Meeting Date N/A

ТО							то										
1.	Gary King																
2.	Frankie McDermott																
3.	3.																
4.									Legal								
5.	5.									CEO & General Manager							
Conse Calend								Budgete	Budgeted Yes				No (If no, explain in Cost/Budgeted section.)				
FROM	(IPR)						DEPARTMENT						MAIL STOP	EXT.	DATE SENT		
	g Fishman / I	Donn	a Lofton	l			Board Office		B307 5079 12/22/24						12/22/20		
NARRATIVE: Requested Action: Provide a summary of committee direction from the Board to Staff.																	
	Summar	-	During a Board discussion at the January 2017 Policy Committee, the Board requested having an on-going opportunity to do a wrap up period at the end of each committee meeting to summarize various Board member suggestions and requests that were made at the meeting in an effort to make clear the will of the Board. The Committee Chair will summarize Board member requests that come out of the committee presentations for this meeting.														
	Board Polic Number & Tit		GP-4 Agenda Planning states the Board will focus on the results the Board wants the organization to achieve.														
	Benefi	,															
С	ost/Budgeted: N/A																
	Alternative	es:	Not summarize the Board's requests at this meeting.														
Aff	ected Partie	es: Board of Directors and Executive Staff															
Coordination: Donna Lofton, Special Assistant to							Assistant to the	e Board									
Presenter: Gregg Fishman, Strategic Developmen							t Commi	ttee C	Chair								

Additional Links:

 SUBJECT
 ITEM NO. (FOR LEGAL USE ONLY)

 ITEMS SUBMITTED AFTER DEADLINE WILL BE POSTPONED UNTIL NEXT MEETING.