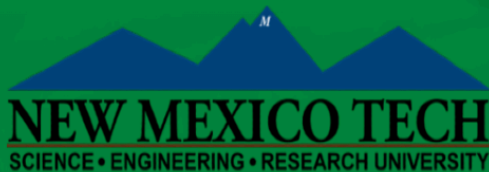


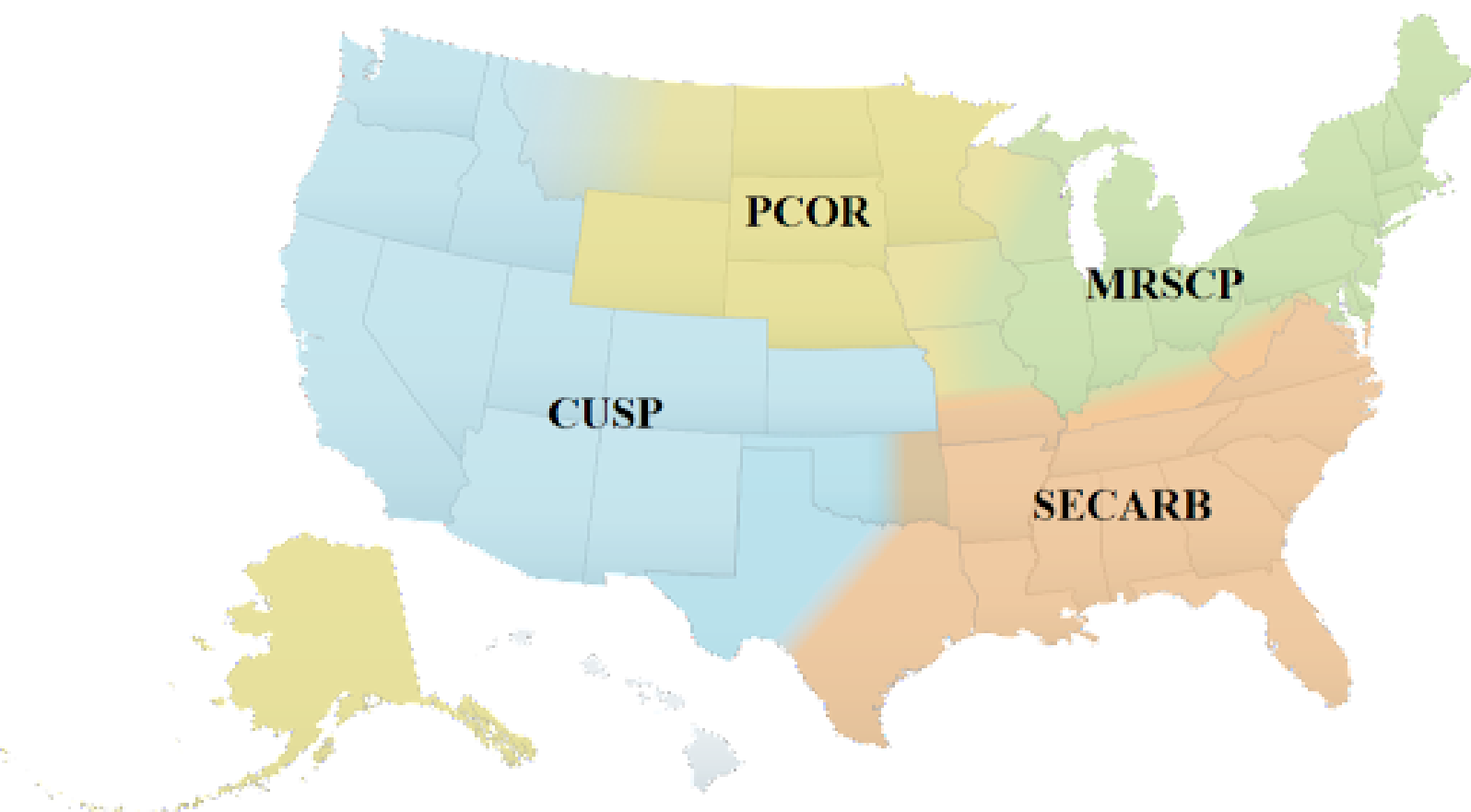


**2024 Annual Meeting
September 10th-11th**



ABOUT CUSP

CUSP: The Carbon Utilization and Storage Partnership of the western U.S. is one of the four regional initiatives established to support the mission of the U.S. Department of Energy/National Energy Technology Laboratory's Carbon Storage and Transport Program. CUSP-West consists of numerous national laboratories, universities, government agencies, and industries residing in the western U.S.



Our Mission: CUSP is set to accelerate onshore CCUS technology deployment and development in the Western Region of the United States thanks to sponsors and funding from the Department of Energy.



EVENT LOCATION

Event Location: Hilton Santa Fe Buffalo Thunder.

Venue Overview: Located in the breathtaking Pojoaque Valley, the Hilton Santa Fe Buffalo Thunder offers a unique setting that blends modern amenities with deep cultural significance. Located on the sovereign Native American land of the Pueblo of Pojoaque, this location provides attendees with an immersive experience in the rich history and culture of the region.

Cultural Highlights:

- **Poeh Cultural Center:** This center is dedicated to preserving and promoting Pueblo culture through art, history, and education.
- **Historic Roman Catholic Church at Chimayo:** A nearby site of pilgrimage, this church is renowned for its rich history and spiritual significance.
- **Bronze Foundry in Tesuque:** Explore the craftsmanship and artistry of this local foundry, known for producing remarkable bronze sculptures.

Historical Significance: Pojoaque Pueblo, one of the six Northern Tewa-speaking Rio Grande Pueblos, has a history of inhabitation dating back as early as 500 AD. Known as “Po-suwae-geh,” meaning the water drinking or gathering place, Pojoaque has maintained a strong cultural identity throughout the centuries. The area is rich in archaeological significance, with evidence of a large prehistoric population in the late fifteenth and early sixteenth centuries.

We look forward to hosting you in this historically and culturally rich setting.



MEETING OVERVIEW

- **Class VI primacy and regulatory implications:** Discussion on the challenges and implications of Class VI and II well permits, Monitoring, Reporting and Verification, 45Q and the broader regulatory landscape.
- **CCS development potential for Native American communities:** Dedicated discussions on the opportunities and challenges in developing CCS projects within Native American Nations. This will include a focus on how these projects can bring economic benefits, workforce development, respect cultural values, and address specific environmental concerns.
- **Integrated Energy Systems:** Exploring the nexus between energy systems, CCUS, and critical minerals, with panels discussing integration and sustainability.
- **National CCUS initiatives:** Insights on national CCUS strategies and opportunities.
- **CUSP States update:** Updates on key projects and western U.S. states efforts.
- **Permitting and Compliance:** Discussions on the permitting processes.
- **CO2 Mineralization:** Technical discussions on CO2 mineralization.
- **Community Engagement and Workforce Development:** Discussion on effective community engagement and building a skilled workforce to support the CCUS industry, ensuring equitable benefits for all stakeholders.
- **Future Regional Initiatives:** A forward-looking panel on regional CCUS initiatives, highlighting opportunities for collaboration and innovation.
- **Latest Technical Developments in CCUS:** Dedicated talks to explore the most recent technical innovations in the CCUS field. Industry experts and researchers will share cutting-edge developments for the future of CCUS.



MAP - MEET & GREET

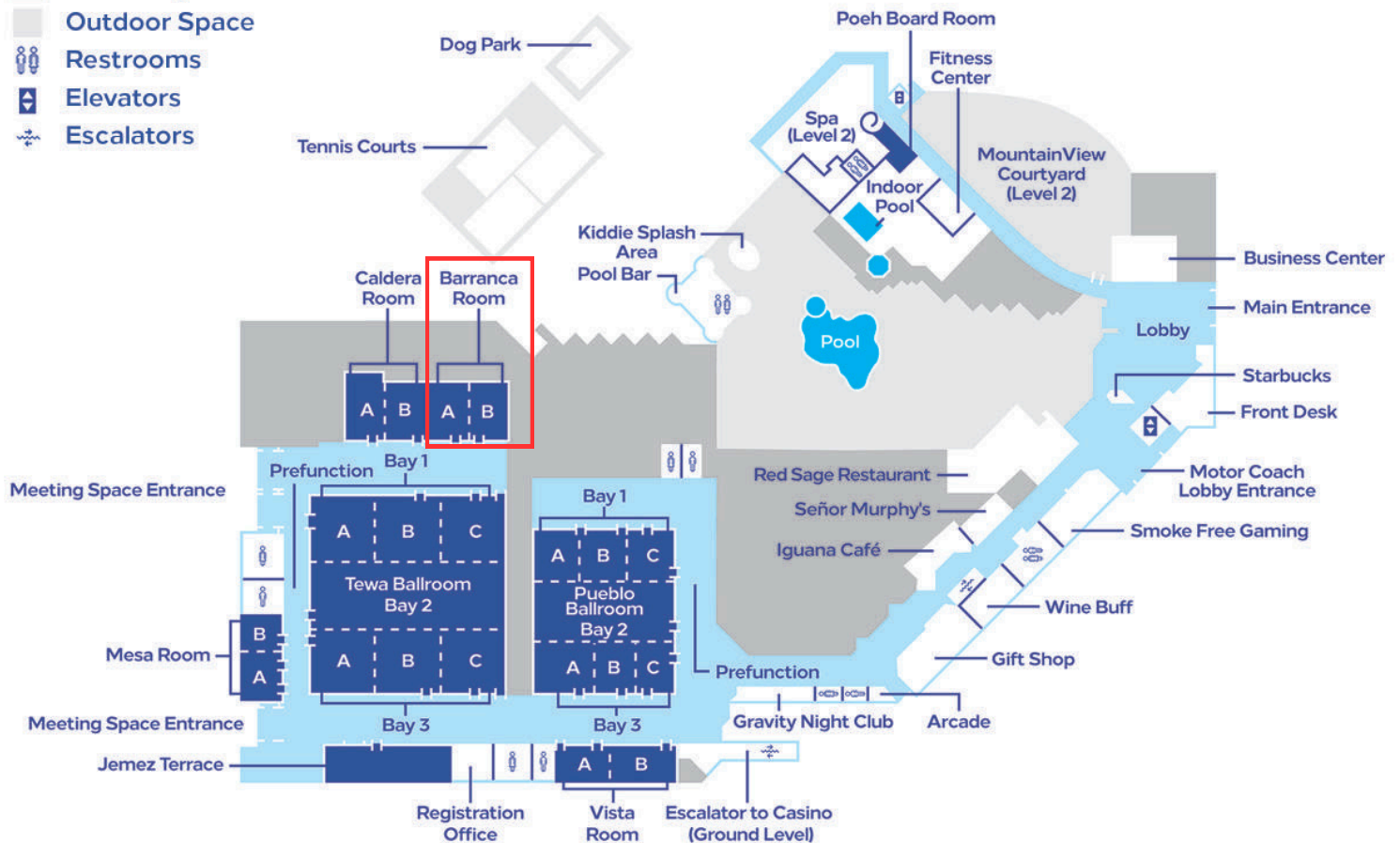
Monday, September 9th, 5:00 - 7:00 PM

Join us for an informal networking reception at the Hilton Santa Fe, held outside and in the Barranca room and providing an excellent opportunity to connect with fellow attendees and industry professionals before the start of the meeting.

Lobby Level

FLOOR MAP KEY

- Meeting / Conference Rooms
- Amenities
- Public Space
- Private Space
- Outdoor Space
- Restrooms
- Elevators
- Escalators

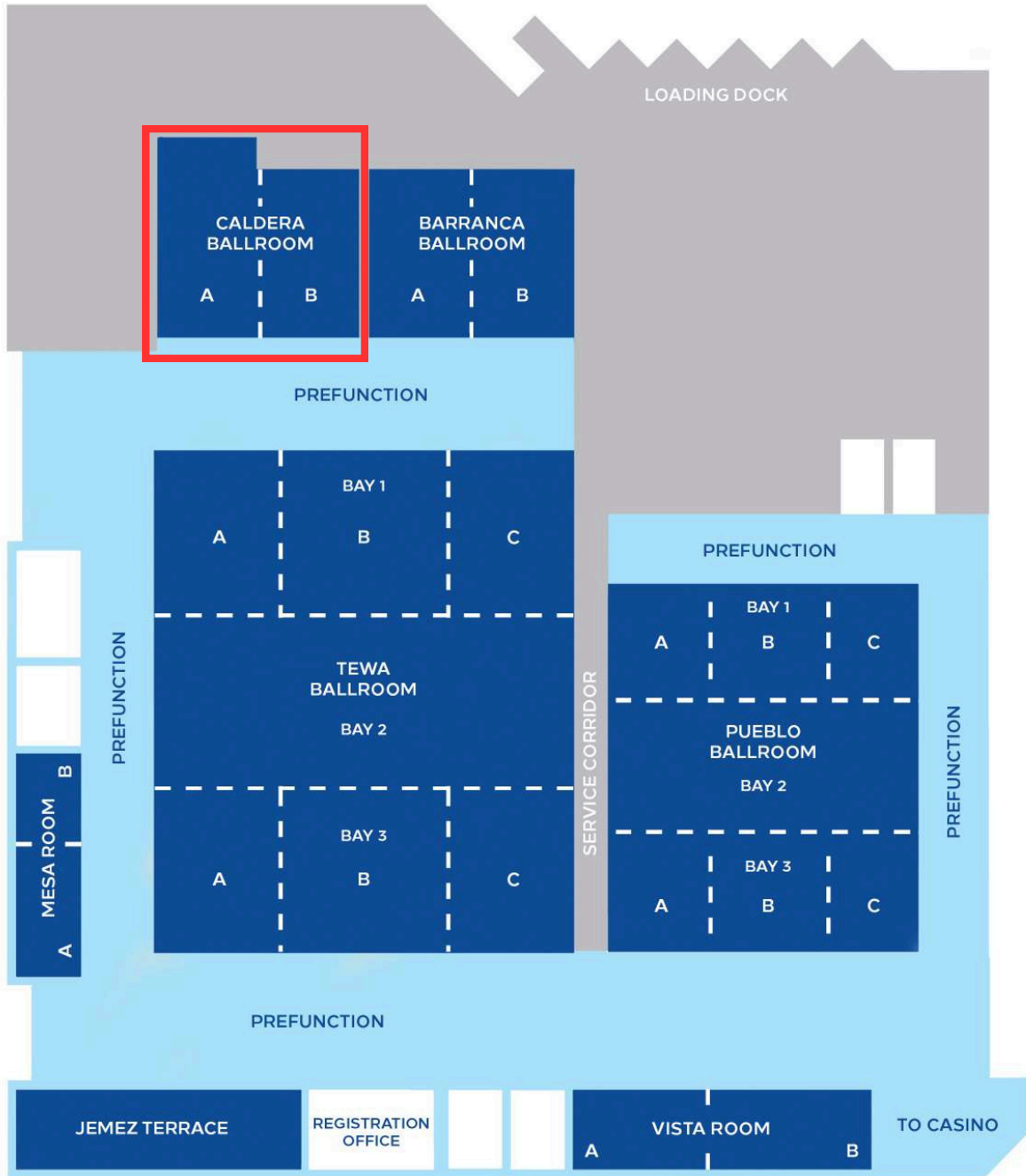


LOCATION - Caldera Room

Conference & Event Rooms

FLOOR MAP KEY

- Meeting / Conference Rooms
- Amenities
- Public Space
- Private Space



DAY 1 - Morning Agenda

Tuesday, September 10th, 7:00 AM - 12:00 PM - Caldera Room

The CUSP Annual Meeting 2024 will kick off with a Continental Breakfast, followed by opening remarks and a series of presentations and discussions focused on regulatory implications and the involvement of Native American communities in CCUS development. The morning will also feature a panel discussion on lessons learned from energy and natural resources development on Tribal Land.

Tuesday, September 10th - Caldera room - Hilton Santa Fe Buffalo Thunder			
Time			Duration
7:00 AM	Continental Breakfast Provided in Caldera Room		
8:00 AM		Opening ceremony	15
8:15 AM	Opening remarks	Dr Amouzegar - New Mexico Institute of Mining and Technology President	5
8:20 AM	Class VI Primacy and 'On the Ground' Implications	Melanie Kenderdine - New Mexico Energy Secretary, New Mexico Energy, Mineral and Natural Resources Department	20
8:40 AM	Overview & Status of CUSP	Dr. Robert Balch & Dr. Brian McPherson	5
8:45 AM		Round Table Introductions	30
9:15 AM	New Mexico Indian Affairs Department	Seth Damon - Deputy Secretary	15
9:30 AM	Navajo Nation, Office of the President/Vice President	Patrick Sandoval - Chief of Staff	15
9:45 AM	Break		
10:15 AM	Groundwater Issues Case Study - White Mesa	Joaquin Lopez-Huertas - University of Utah	15
10:30 AM	Groundwater Management in the Four Corners Area	Easton Hopkins - University of Utah	15
10:45 AM	Panel: Lessons learned from energy and natural resources development on Tribal Land		60
	Facilitator: Steve Grey . Panel: Joaquin Lopez-Huertas, Demi Morishige, Lydell Rafael, Bill McCabe		
11:45 AM		Pojoaque Ceremonial Prayer	15
12:00 PM	LUNCH Provided	Energy Transition Act (ETA), Jason Sandel	60



DAY 1 - Afternoon Agenda

Tuesday, September 10th, 12:00 - 7:30 PM - Caldera Room

After a lunch, the afternoon meeting will continue with presentations on national initiatives and synergies in the CCUS field, followed by discussions on specific successful projects, and community engagement and workforce development. The day will wrap up with a cultural ceremony and a dinner at Red Sage, providing attendees with further opportunities for networking and reflection.

12:00 PM	LUNCH Provided	Energy Transition Act (ETA), Jason Sandel	60
1:00 PM	DOE perspective, tribal engagement and upcoming opportunities	Peter Olivares - Rural & Tribal Engagement, Office of Community Engagement, U.S. Department of Energy	30
1:30 PM	DOE and interagency efforts	Matt Dannenberg - Senior Tribal Liaison, Congressional and Intergovernmental Affairs	15
1:45 PM	Panel: Integrated Energy Systems and CCS-Critical Minerals Nexxus		60
	Facilitator: Steve Grey . Panel: Jason Sandoval, Terry Dayish, Lionel Huski, Richard Luarkie		
2:45 PM	Break - Snacks Provided		30
3:15 PM	CUSP Focus Project: CCS at the Iron Mountain Iron Mine and Direct Reduced Iron Processing Plant, Southern Utah	Miken Larson - Utah Iron & Dr. Nate Moodie - University of Utah	25
3:40 PM	CUSP Focus Project: Red hills	Matt Eales , Targa midstream	15
3:55 PM	Panel: Community Engagement and Workforce Development		60
	Facilitator: Fonquergne Jean-Lucien . Panel: Jessi Eidbo, Fayth Gillespie, Dr. Ranalda Tsosie, Craig J. Williams, Jacob Evenson, Matthew Gonzales		
4:55 PM	Tomorrow's Plan	Dr. Robert Balch & Dr. Brian McPherson	5
5:00 PM			60
6:00 PM	Cultural ceremony		30
6:30 PM	Dinner Provided at Red Sage, Buffalo Thunder		0



DAY 2 - Morning Agenda

Wednesday, September 11th, 7:00 AM - 12:30 PM - Caldera Room

The Day 2 of the meeting will begin with a Continental Breakfast. The morning sessions will start with updates on CUSP working groups and CCUS developments across various states included within the CUSP. The morning will conclude with a panel discussion on future regional initiatives within CUSP.

Wednesday, September 11th - Caldera room - Hilton Santa Fe Buffalo Thunder			
Time			Duration
7:00 AM	Continental Breakfast Provided in Caldera room		
8:00 AM	Welcome, Day's Agenda & Goals	Dr. Robert Balch & Dr. Brian McPherson	
8:00 AM	Status of CUSP Working Groups		
8:00 AM	Data Organization	Tom Cook - Univeristy of Utah	10
8:10 AM	Data Analytics	Dr. Sean Yaw - Montana State University	10
8:20 AM	Economics	Dr. Shruti Mishra - Sandia National Laboratories	10
8:30 AM	CUSP: state of the States		
8:30 AM	Texas	Dr. Robert Trentham - The University of Texas Permian Basin	10
8:40 AM	Oklahoma	Dr. Nick Hayman - Oklahoma Geological Survey	10
8:50 AM	Kansas	Dr. Brendan Bream - Kansas Geological Survey	10
9:00 AM	New Mexico	Dr. Amosu - New Mexico Institute of Mining and Technology	10
9:10 AM	New Partners	Dr. Brian McPherson / Ruarri Day-Stirrat - Oregon Department of Geology and Mineral Industries	10
9:20 AM	Break		20
9:40 AM	Nevada	Dr. Rishi Parashar - Desert Research Institute	10
9:50 AM	Colorado	Dr. Ali Tura - Colorado School of Mine	10
10:00 AM	California	Dr. Anthony R. Kovscek - Stanford University	10
10:10 AM	Washington	Dr. Lee Florea - Washington Geological Survey	10
10:20 AM	Utah	Dr. Gabriela St Pierre - Utah Geological Survey	10
10:30 AM	Arizona	Brian Gootee - Arizona Geological Survey	10
10:40 AM	Break		20
11:00 AM	Panel: Future regional initiatives within CUSP		90
	Facilitator: Dr. Brian McPherson . Panel: Dr. William Ampomah, Dr. Richard Middleton, Dr. Robert Trentham, Dr. Anthony R. Kovscek, Dr. Gabriela St Pierre, Dr. Ting Xiao, Lynne L'Esperance		
12:30 PM	Lunch provided	Side discussion - Steve Grey	60



DAY 2 - Afternoon Agenda

Wednesday, September 11th, 12:30 PM - 5:45 PM - Caldera Room

The afternoon will continue with a focus on key technical and regulatory topics. The sessions will begin with a panel discussion on CO2 mineralization, followed by updates on UIC Class VI state developments. Attendees will then engage in a panel discussion on UIC Classes, 45Q, and MRV. The afternoon will also feature technical presentations addressing challenges in CCUS projects and showcasing the latest technologies. The day will conclude with a dinner at the Pueblo Room.

12:30 PM	Lunch provided	Side discussion - Steve Grey	60
1:30 PM		Panel: CO2 Mineralization Facilitator: Lisa Thompson . Panel: Dr. Lee J. Florea, Dr. Sai Wang, Dr. Eusebius Kutsienyo, Dr. Quin Miller	45
2:15 PM	Class VI state updates	Dr. Gregory Schnaar - Daniel B. Stephens & Associates, Inc	15
2:30 PM		Panel: UIC Class VI, Class II, MRV and 45Q Facilitator: Jennifer Raney . Panel: Dr. Robert Balch, Matt Eales, Dr. Gregory Schnaar	30
3:00 PM		Break	20
3:20 PM	Gigaton CO2 Transport	Dr. Bailian Chen - Los Alamos National Laboratory	10
3:30 PM	National Risk Assessment Partnership (NRAP) tools	Dr. Bailian Chen - Los Alamos National Laboratory	10
3:40 PM	Machine learning for subsurface storage (SMART tools)	Dr. Eusebius Kutsienyo - Pacific Northwest National Laboratory	15
3:55 PM	Acronym Soup - An Overview of What NEPA Is and How It is Applied	Nikki Wallenta - KLJ	25
4:20 PM	CCUS Insurance	Matt Ward - IMA	25
4:45 PM	Fiberglass Lined Tubing in CO2 Injection Wells	Alwyn Fernandez - Duoline	15
5:00 PM	Casing challenges	Tom Slaughter/Brad Huber - CRA	15
5:15 PM	The Advantages of UnSteady-State Relative Permeability for CCUS	Joel Walls - Premier Corex	15
5:30 PM	Subsurface seismic monitoring	Brett Bunn - Geospace	15
5:45 PM	Tomorrow's Plan	Dr. Robert Balch & Dr. Brian McPherson	
6:00 PM		Dinner provided in the evening at Pueblo Room - Hilton Santa Fe Buffalo Thunder	0



DAY 3 - OPTIONAL for CUSP

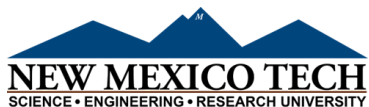
Thursday, September 12th, 08:00 PM - 12:00 PM - Caldera Room

Day 3 of the CUSP Annual Meeting 2024 is optional and will allow gather CUSP team members, but other attendees are welcome to participate. We will focus on the review and planning of ongoing and future CCUS initiatives. The morning will include discussions in working group breakout sessions to develop strategic plans and set objectives for the upcoming year. The focus will be on consolidating the progress made during the meeting and outlining clear action plans to drive CCUS initiatives forward.

CUSP Agenda - Annual Meeting 2024		
Thursday, September 12th - OPTIONAL - CUSP MEMBERS		
Time		Duration
7:00 AM	Continental Breakfast - Caldera room	
8:00 AM	Agenda & Goals	10
8:10 AM	Project Strategy session - Objectives and Plan of Action	90
9:40 AM	BREAK	30
10:10 AM	Working Group Breakout Sessions - Plan for Achieving Objectives (CarbonBASE, CarbonSAFE, Working Session)	90
11:40 AM	BOXED LUNCHES PROVIDED	60
12:40 PM	Adjourn	



RESEARCH PARTNERS



New Mexico Institute of Mining and Technology (NMT)



University of Utah (UU)



University of Oklahoma (UO)



Colorado School of Mines (CSM)



The Desert Research Institute (DRI)



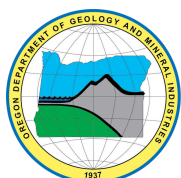
University of Texas Permian Basin (UTPB)



Montana State University (MSU)



Stanford University (SU)



Oregon Department of Geology and Mineral Industries



University of Wyoming (WU)



New Mexico Bureau of Geology and Mineral Resources (NMBGMR)



Indiana University of Bloomington (IU)



Carbon Solutions LLC



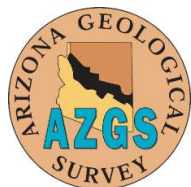
Montana Bureau of Mines and Geology



Utah Geological Survey



Oklahoma Geological Survey



Arizona Geological Survey



Kansas Geological Survey



Washington Dept. of Natural Resources



Los Alamos National Labs (LANL)



Sandia National Labs (SNL)



Pacific Northwest National Labs (PNNL)



Idaho National Labs



Mexican Carbon Capture & Service Platform (MeCCS)

INDUSTRY PARTNERS



Targa Resources Corp.



ONEOK



Occidental Petroleum Corp.



Paulson, Inc.



Nikola Corp.



Utah Iron, LLC



Schlumberger



Durango Midstream LLC



Riley Exploration Permian



Enchant Energy Corp.



Piñon Midstream



Capture Point LLC



Tallgrass Operations, LLC



Escalante H2 Power



Geospace Technologies



ENGINEERING. REIMAGINED
KLJ



LOGOS Resources, LLC



Premier Corex



Sentinel Peak Resources



TC Energy Corp.



CRA



Duoline Technologies



Carbon America



Permian Oilfield Partners, LLC



OMNIA

SPONSORS



Permian Oilfield Partners was founded with the goal of revolutionizing how salt water is managed in the midstream industry. With an executive team of experienced operators and service companies, POP understands what the customer's midstream needs are and how to provide effectively.



Utah Iron, LLC is a mining company that has the most accessible iron-ore bodies in the western United States, while also providing assistance in commercial-scale carbon capture and storage projects.



Duoline Technologies, LLC is a U.S. based lining system manufacturer, designing and installing corrosion resistant lining systems for oilfield steel tubing and line pipe.



Geospace Technologies is a global, publicly-traded design, engineering, and manufacturing company. They work in diverse industries around the world to provide actionable intelligence for energy exploration and other industrial applications.



Premier Corex is a global leader in aggregation, generation, and application of rock and fluid data, utilizing it to better understand, explore, and develop earth resources.



ENGINEERING, REIMAGINED

KLJ Engineering has 85 years in the engineering industry, focusing on innovative solutions for local, regional, and national infrastructure projects such as roads, runways, pipelines, and parks.



Corrosion Resistant Alloys, LLC is a mill manufacturer of high-quality, corrosion resistant alloy tubulars, with the intention to improve upon the inefficiencies of distribution by being the fastest, most reliable, quality provider of corrosion-resistant alloy tubulars in the world.

Interested to learn more about CUSP?

Visit us at www.cuspwest.org

