Utah and Colorado - Opportunities to Collaborate
Policy, Advocacy and Development of Natural Gas Markets
for the Uintah and Piceance Basins

August 30, 2017

Hosted by the Utah Governor’s Office of Energy Development, West Slope Colorado Oil and Gas Association, Colorado Energy Office, Uintah County, the Utah Petroleum Association and Consumer Energy Alliance
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Background

The United States Geological Survey (USGS) considers the Uintah basin in eastern Utah and the Piceance basin in western Colorado a single, priority province with significant natural gas resource potential for its National Oil & Gas Assessment.

In the USGS Uintah-Piceance study area, about 63 percent of the land surface is administered by the Federal Government, about 5 percent is Tribal land, about 6.5 percent is administered by the States, and about 25.5 percent is held by private owners. Of the 63 percent of Federally administered lands, the Bureau of Land Management is responsible for about 42 percent, the Forest Service about 20 percent, and the National Park Service about 1 percent.

Market Overview

At the end of July 2017, the spot price for Northwest Rockies natural gas was around $2.60 per MMBtu, $0.39 less than the Henry Hub spot price. Offtake markets for Rockies’ gas remain limited with Northeast gas pushing west, Canadian gas forcing its way south and the demand for gas in Southern California slowed down by continued renewable energy expansion. As a result, Rocky Mountain natural gas producers can continue to expect volatility in the Rockies basis, and lower profit margins than the historical norm.

According to a report commissioned by the Grand Junction (Colorado) Economic Partnership entitled *From the Piceance to the Pacific Rim – How Expanded U.S. LNG Exports Could be Critical to the Development of Natural Gas Reserves in Colorado’s Western Piceance Basin*, emerging world demand for liquefied natural gas may increase demand and create new markets for western Colorado (and eastern Utah as this panel will explore).

However, infrastructure is needed to move Rockies-produced natural gas to the Pacific for export to markets where natural gas is much scarcer. The Uintah-Piceance basin’s plentiful natural gas reserves coupled with its existing midstream pipeline and processing infrastructure add to the appeal of Rocky Mountain natural gas to foreign export markets, especially those in eastern Asia.
Jordan Cove LNG Port

Located, at Coos Bay, Oregon, Jordan Cove would be the Pacific Coast’s first LNG export terminal. The terminal would give Western producers access to the world’s largest gas market, consisting of Japan, the biggest consumer, South Korea, Taiwan and other Asia-Pacific countries. The 235-mile Pacific Connector pipeline is also part of the project. It would cross Oregon and provide a critical link between the export terminal and the rest of the West’s pipeline network, which stretches into the gas-rich Uintah-Piceance basin.
• Jordan Cove LNG is ideally located within the Port of Coos Bay, Oregon. The Jordan Cove LNG terminal will have an initial liquefaction design capacity of 7.8 million tons per annum (mtpa), or approximately 1 billion cubic feet (Bcf) per day.

• 1.5 hours to open ocean

• Clear, 7-mile channel
LNG Terminal Similar to Jordan Cove Project

LNG Terminal, Sweden
Agenda

Wednesday, August 30, 2017
4:00 – 5:30 pm

4:00 pm Keynote/Introduction

Utah Lieutenant Governor Spencer Cox

4:30 pm Panel/Natural Gas Markets for the Uintah and Piceance Basins

Moderator
Andrew Browning - Chief Operating Officer, Consumer Energy Alliance

Panelists
Dr. Laura Nelson - Energy Advisor to the Governor of Utah, Executive Director, Utah Office of Energy Development
Bob Braddock – Sr. Project Advisor, Jordan Cove LNG
*Elizabeth Spomer – CEO and President, Jordan Cove LNG
  (*Unable to attend due to Hurricane Harvey)
Kathleen Staks - Executive Director, Colorado Energy Office
David Ludlam - Executive Director, West Slope Colorado Oil & Gas Association
Charlie Wojta - Marketing Manager, Newfield Exploration

This panel will examine a joint political, policy and advocacy strategy that utilizes the significant political influence and resources of the Utah and Colorado delegations to address the major natural gas demand and infrastructure challenges facing natural gas producers in the Uintah-Piceance basin. The panel will also discuss the broad and bi-partisan political coalition that has been successfully developed to promote Jordan Cove LNG in Colorado and the policy, political and advocacy tools at the state, local and national levels that are needed to develop natural gas demand outlets and change the economics of Rocky Mountain natural gas.
Speaker & Panelist Bios

Keynote Speaker

**Lieutenant Governor Spencer J. Cox:** Spencer Cox was sworn in as Utah's 8th Lieutenant Governor on October 16, 2013.

As Lieutenant Governor, he serves as the chief election officer, liaison between the governor and the state legislature, and serves on 20 committees and commissions, chairing 12 of them.

Spencer was born and raised in the town of Fairview, Utah. He and his wife Abby both come from large families, and were raised on farms in Sanpete County, where they learned the value of hard work and collaboration. Spencer and Abby are the parents of four children between ages 9 and 17: Gavin, Kaleb, Adam, and Emma Kate.

Spencer and Abby both graduated from North Sanpete High School, Snow College, and Utah State University. Abby received a degree in special education, while Spencer earned a degree in political science with a minor in Spanish.

Spencer graduated from the Washington and Lee School of Law, in Virginia, then returned to Utah for the opportunity to serve as a law clerk to Federal District Judge Ted Stewart. Following his clerkship, Spencer began his career as an attorney at the law firm of Fabian and Clendenin in Salt Lake City.

In 2003, they decided to return to Sanpete County and raise their family in rural Utah. Spencer served as Vice President and General Counsel of CentraCom: a full-service telecommunications company with one of the largest fiber optic networks in the state.

Spencer has served as a Councilman and Mayor of Fairview City, as a Sanpete County Commissioner and in the Utah House of Representatives, representing most of Sanpete and Juab Counties.

Spencer is strongly committed to supporting families and transforming education. Other priorities include increasing voter participation, utilizing modern technologies, promoting healthy living, and empowering the impoverished and homeless.
Moderator

**Andrew Browning, Consumer Energy Alliance:** Andrew Browning provides expertise on issues related to unconventional shale energy development, Western lands oil shale, oil sands, arctic resources and offshore resources. With over 20 years of experience in both the private and government sectors, he was part of the founding of HBW Resources in 2008. Browning was previously Director of Government Relations at Methanex—the world’s largest methanol producer and distributor- and a White House appointee to the U.S. Department of Energy during the Clinton administration. He holds a Master’s degree in International Affairs from Johns Hopkins School of Advanced International Studies (SAIS) and a B.A. in Government from the University of Texas at Austin.

Panelists

**Dr. Laura Nelson, Utah Office of Energy Development:** Dr. Laura Nelson was appointed in May 2016 by Governor Herbert to serve as his Energy Adviser. She continues to also serve as the Executive Director of the Utah Office of Energy Development, a position she has held since July 2014. Prior to joining Governor Herbert’s Energy Office, Dr. Nelson served as the Vice President of Government and Regulatory Affairs for Potash Ridge, Corp., the Vice President of Energy and Environmental Development at Red Leaf Resources, and as the Energy Advisor to Utah Governor Jon M. Huntsman. She also served as the Energy Policy Advisor to the Idaho Public Utilities Commission and a Technical Consultant to the Utah Division of Public Utilities.

Dr. Nelson has over 20 years of experience working on energy and natural resource issues in both the public and private sectors. She has a solid track record of working collaboratively to deliver positive policy, regulatory, and commercial results.

Dr. Nelson holds a Ph.D. in Economics from the University of Utah and resides with her family in Salt Lake City.
Kathleen Staks, Colorado Energy Office: In January 2017, Gov. John Hickenlooper appointed Kathleen Staks as the Executive Director of the Colorado Energy Office (CEO). Staks works to ensure that Colorado’s energy portfolio benefits Colorado businesses, workers and families by improving the effective use of all of Colorado’s energy resources across all economic sectors. Prior to her appointment at CEO, Staks served as Assistant Director for Energy at the Colorado Department of Natural Resources, where she advised and coordinated with the Colorado Oil and Gas Conservation Commission, the Division of Reclamation, Mining and Safety and the Governor's office.

Staks worked at Great Outdoors Colorado (GOCO) for six years as the program director for open space and parks and wildlife. In that position, she oversaw land conservation grant programs and managed the relationship between GOCO and the Colorado Division of Parks and Wildlife. Before working at GOCO, Kathleen worked on land conservation policy with the Colorado Coalition of Land Trusts.

Kathleen has a law degree from the University of Denver and a journalism degree from Southern Methodist University in Dallas, Texas.

David Ludlam, West Slope Colorado Oil & Gas Association: Representing North America’s Piceance Basin, David advocates for Western Colorado’s Natural Gas businesses promoting demand creation and advocating favorable and fair regulatory environments for producers, midstream operators and their vendors and suppliers. He serves as Chair of the Mesa County Federal Mineral Lease District, the energy representative of the Bureau of Land Management’s Northwest Resource Advisory Committee and was appointed to The Colorado Mesa University President’s Advisory Council.

David worked for the Colorado General Assembly and the U.S. House of Representatives prior to his association work and was a co-founder of Phase Change Energy Solutions.

As an adjunct University lecturer Ludlam enjoys teaching and preparing the next generation of energy professionals.
Charlie Wojta, Newfield Exploration: Charlie Wojta is marketing manager for domestic natural gas and natural gas liquids production at Newfield Exploration Company. He is responsible for overseeing marketing for the Company’s domestic basins to ensure netback pricing quality and reliable and uninterrupted product flow. He also forecasts potential opportunities or challenges and manages Newfield’s midstream relationships throughout the domestic U.S. Charlie leads a team that includes marketing and scheduling, gas balancing and midstream representatives. He began his career at Newfield in 2015 after spending nearly 20 years working in the marketing and trading segment of the oil and gas industry. He has a B.S. in economics from Northern Illinois University.

Bob Braddock, Jordan Cove LNG: Mr. Braddock is presently Senior Project Advisor and former Project Manager for the Jordan Cove LNG exportation terminal proposed for construction in Coos Bay, Oregon. In 1966 he held his first job in the energy industry as night laboratory technician for The Oil Shale Corporation (TOSCO) in support of the Colony Oil Shale Project’s Semi-works plant located at Parachute Creek. Mr. Braddock has since held positions of process engineer, engineering economist, manager of enhanced oil recovery operations and manager of research for the Tosco Corporation. Beginning in 1983 Mr. Braddock began to develop and manage the construction and operation of natural gas based projects. Industries and locations of a select cross-section of these natural gas based projects include: methanol and hydrogen production (Szechuan Province, Peoples Republic of China; Colorado), iron carbide manufacture (Republic of Kazakhstan), natural gas gathering and processing; (Kansas, Wyoming & Colorado), and helium recovery (Colorado).

Education:
Colorado School of Mines (1967) – B.S./Metallurgical Engineering
University of Colorado (1972-1974) – Doctoral Program/Finance
Elizabeth Spomer, Jordan Cove LNG: Ms. Spomer has over 30 years of experience in the energy industry, having the majority of her career in the LNG industry. Ms. Spomer has extensive experience in commercial activities and developing new growth opportunities. Prior to joining Jordan Cove LNG, Ms. Spomer was Senior Vice President, Global Business Development with BG Group PLC. Ms. Spomer has also held senior leadership positions with BP and Amoco.

Over Ms. Spomer’s career, she has been involved in LNG projects worldwide including LNG export projects in Trinidad and Tobago, Egypt, Australia, Western Canada and the United States Gulf of Mexico and LNG import projects in the United States, China, Singapore and Chile.

Betsy graduated with a B.A. in Economics and History as well as an MBA from the University of Colorado.

- Unable to attend due to Hurricane Harvey
The Utah Governor’s Office of Energy Development (OED) was formed in 2011 in response to the Governor’s 10-Year Strategic Energy Plan. Led by Dr. Laura Nelson, OED is responsible for implementing the state energy policy (63M-4-301) by facilitating the development of the Utah’s diverse energy and minerals sector. The OED provides industry assistance through the administration of state and federal tax incentives, fosters education and technological innovation, and collaborates with a variety of stakeholders in government, nonprofit and the private sector. The office is also dedicated to promoting responsible energy policies, and regularly handles public lands and environmental issues.

Mission of OED

To advance all forms of responsible energy and minerals for the provision affordable, reliable and sustainable energy through industry assistance, education and outreach, and policy to promote resource diversity and innovation.

Those diverse forms of energy and minerals include:

- Conventional
- Unconventional
- Renewable
- Energy Efficiency
- Infrastructure
- Non-Fuel Minerals

Strategic Objectives

Investment
Infrastructure
Energy Education
Integration of New Energy Sources: Energy Efficiency, Renewables, and Storage
Alternative Transportation
Changing Federal Policies
Jordan Cove LNG is a proposed liquefied natural gas (LNG) export facility currently moving through federal, state and local permitting processes to build and operate an LNG export terminal in the Port of Coos Bay (southern Oregon coast) with the intention to move North American natural gas to the Asia Pacific market. Jordan Cove is the only terminal proposed for the US west coast and the project already has two of the world’s leading LNG customers signed on, one of which is JERA, the largest LNG buyer in the world. To get gas from regions like the Piceance Basin, Jordan Cove would build a 230 mile pipeline from the existing Ruby Pipeline located in Malin, OR to the Oregon coast, thus connecting Jordan Cove to the Rocky Mountain supply basins and creating one of the most advantageous export hubs in the world. Jordan Cove is just 9 shipping days from Tokyo Bay and avoids current commercial obstacles such as over- Panama Canal uncertainties and risky hurricane conditions experienced in the Gulf of Mexico.

The project is moving through the initial stages of the FERC permitting process, but has already garnered bi-partisan support from Governor Herbert (R-UT), Sen. Hatch (R-UT), Sen. Lee (R-UT), Rep. Stewart (R-UT), Rep. Bishop (R-UT), Rep. Love (R-UT), Governor Hickenlooper (D-CO), Senator Gardner (R-CO), Senator Bennet (D-CO), Representative Tipton (R-CO), Rep. Perlmutter (D-CO), Rep. Lamborn (R-CO), Rep. Buck (R-CO), Governor Mead (R-WY), Sen. Barrasso (R-WY), Sen. Enzi (R-WY) and Rep. Cheney (R-WY).

Newfield Exploration is focused on domestic, liquids-rich unconventional resource plays, located primarily in the Uinta Basin of Utah, Williston Basin of North Dakota and Anadarko and Arkoma basins of Oklahoma. Newfield also has oil developments offshore China. Approximately 98 percent of the Company’s proved reserves are located onshore U.S.

Newfield owns interest in approximately 215,000 net acres in the Greater Monument Butte field area, located in the Uinta Basin of Utah. The Company entered the basin in 2004 through an acquisition of the Greater Monument Butte field. Currently, operations are divided into two areas—the Greater Monument Butte Unit waterflood and an area to the north and adjacent to the GMBU that is referred to as the Central Basin. The primary producing horizon in the Unit is the Green River formation. The Company is assessing large-scale, stacked horizontal plays—including the Uteland Butte and Wasatch formations, among others.

Today, Newfield is the largest oil producer in Utah. At the end of 2016, the Company’s net production was approximately 16 MBOEPD with nearly 1,500 productive oil and more than 900 water injection wells in operation. Since its entry into the basin, Newfield has consistently focused on delivering the latest technological innovations. In 2010, Newfield was the first company to pioneer horizontal drilling and in 2013, it drilled its first extended reach horizontal well. The Company has drilled almost 80 horizontal wells to date—and expects to reach nearly a 100 by year-end 2017. Newfield is currently running one rig in the basin.
Founded in 1984, COGA’s purpose is to foster and promote the beneficial, efficient, responsible, and environmentally sound development, production, and use of Colorado’s oil and natural gas resources. COGA is a nationally recognized trade association that aggressively promotes the expansion of Rocky Mountain oil and natural gas markets, supply, and transportation infrastructure through its growing and diverse membership. As an organization, COGA values:

- Innovative approaches to engagement, education, and providing member value;
- Thoughtful policy that prioritizes the best interests of Colorado and communities while representing industry objectives;
- Authentic, transparent engagement with communities and industry stakeholders;
- Representing the best interests of the industry statewide over individual companies or basins;
- Creating transparent, accountable collaboration with stakeholders.
- We commit to leading the industry with uncompromising integrity, honesty, respect, and fairness.

As momentum in the political and legal fronts continues to move in a favorable direction, the industry faced new challenges in 2015 as the price of crude declined. In a depressed pricing environment, COGA will use the infrastructure that has been developed over the last several years to further refine our effectiveness to continue to achieve the following objectives in a financially responsible manner:

Uintah County is located in the central portion of the Uinta Basin, part of which extends 60 miles into western Colorado. Vernal, serves as the county seat. Natural resource extraction makes up a major portion of the county’s economy. In fact, the county is Utah’s largest producer of natural gas. Other important resources in the county include, oil, phosphate, and gilsonite. The county also has an active agriculture industry.

“A significant portion of west Uintah County is taken up by the Uintah and Ouray Indian Reservation. The Ute Tribe’s headquarters is in Fort Duchesne. Much of the rest of the county is land owned by the Ashley National Forest and the Bureau of Land Management. There is relatively little private land in the county.

Discovery of significant dinosaur and other pre-historic remains on the eastern edge of the county caused nationwide interest, which culminated in establishment of Dinosaur National Monument. In addition to the large Visitor Center at the Monument's Jensen site, a Museum of Natural History, showcasing some of the area’s finds, was established in Vernal by the State of Utah.¹”

¹ https://en.wikipedia.org/wiki/Uintah_County,_Utah
The Utah Petroleum Association (UPA) is comprised of companies from every segment of the petroleum industry who work cooperatively to resolve mutual problems and provide a unified voice for the advancement and improvement of the oil and gas industry in Utah. UPA was founded in 1958 and continues today as the voice of Utah's oil and natural gas industries. We seek to promote the responsible development of Utah's vast natural resources and the manufacture of fuels that keep Utah families and businesses moving.

UPA's mission is to promote and support the oil and gas industry in Utah and the advancement of the interests of our Member Companies. We work to unite and focus the efforts of the industry to maintain a healthy business climate in the State and ensure a fair and predictable legislative and regulatory environment that allows us to operate and be successful. We also strive to educate and be a resource for the public to better understand the petroleum industry and value of having the industry in Utah and importance of the energy and products we produce.

CEA’s mission is to nurture and guide substantive dialogue between energy consumers and energy providers, as well as to successfully advocate at the grassroots and grass tops level in support of a balanced U.S. energy policy.

By bringing together consumers, manufacturers, retirees, transportation, agriculture groups, small business, academia and labor, CEA functions as an extension of your advocacy network, cultivating and enabling consumers to serve as an active, third-party voice in support of domestic energy production and a balanced energy policy for America. Since its inception in 2006, CEA has played a pivotal role in transforming the energy debate to better focus on the impact to the consumer and the positive economic and energy security benefits that derive from a thoughtful, balanced energy policy.

Please find out more about CEA at www.consumerenergyalliance.org
Mission
To deliver cost-effective energy services and advance innovative energy solutions for the benefit of all Coloradans.

Vision
To help Coloradans live more prosperous and healthy lives by promoting innovative energy production and efficient energy consumption practices that are beneficial to the economic and environmental health of the state.

According to EIA, in 2016:

- 23.23% of electricity generated in Colorado was fueled by natural gas.
- Colorado ranked 6th in marketed natural gas, producing over 1.7 million cubic feet.
- Colorado has the third largest gas reserves in the country.
- Colorado produces more natural gas than all the energy it consumes in a year across the entire energy sector.

Colorado has one of the best business climates for compressed natural gas, with tax credits and grants available for vehicles, as well as plans to build 25-30 new CNG stations by 2018 through the [ALT Fuels Colorado program](#). Oil and gas development is regulated on the state level by the Colorado Oil and Gas Conservation Commission and the Colorado Department of Public Health and Environment.