

February 2018

February dates to remember

- Feb. 2 - Groundhog's Day
- Feb. 4 - Superbowl 52
- Feb. 11 - National Inventors Day
- Feb. 14 - Valentine's Day
- Feb. 18 - Battery Day
- Feb. 23 - Diesel Engine Day

COMING IN MARCH:**DESK AND DERRICK AWARENESS MONTH****Inside this issue:**

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ADDC Insight

Sand, water, and horsepower: Welcome to the year of the fracker

By Jordan Blum, Houston Chronicle
January 25, 2018 Updated: January
26, 2018 12:12pm



Photo: Steve Gonzales, Staff

A Halliburton employee work near rows of hydraulic fracturing pumping units at a three pad site Monday, June 26, 2017, in Midland. (Steve Gonzales / Houston Chronicle)

Oil companies are on track to produce a record 10 million barrels of American crude a day, a milestone that could be reached as soon as February largely due to another record that is expected to fall in coming months.

By the end of the year, fracking intensity is projected to exceed levels reached in 2014 - the height of the so-called shale revolution - as hydraulic fracturing operations use more sand, more water and more pumping horsepower

than ever before to free oil and gas from shale rock. The result: U.S. crude production should reach an all-time high with just half the number of drilling rigs used at the peak of the last energy boom. Welcome to the year of the fracker.

The controversial technology that transformed the U.S. energy industry and reshaped global oil markets has advanced to a new level, becoming more science than art as fracking operations run round the clock, target ever smaller sections of wells with greater precision and greater force, and squeeze more oil out of every well.

"It never stops," said David Adams, senior vice president for completions and production for Halliburton of Houston. "We're pushing the limits."

As fracking plays an even larger role in oil production, it is boosting oilfield services companies like Halliburton that employ tens of thousands of people in Houston and Texas as well as creating more jobs near the state's shale fields, particularly the Permian Basin in West Texas, and increasing the flow of oil and gas to fuel an export boom of crude, chemicals and

liquefied natural gas along the Gulf Coast.

It also is intensifying environmental concerns about air and water pollution, the destruction of habitat, the future of endangered species and increased number of earthquakes, which have been tied to the millions of barrels of chemical-laced wastewater that are pumped into deep, underground disposal wells.

"There are still people out there subjected to significant health impacts and potential property damage or, at least, having the wits scared out of them," said Luke Metzger, director of the advocacy group Environment Texas.

Fracking 101

Hydraulic fracturing, or fracking, is the high-pressure injection of water, sand and chemicals to crack shale rock and release oil and natural gas. When energy companies combined fracking with horizontal drilling, it allowed producers to tap multiple reservoirs of oil and gas from a single rig site, ultimately reviving U.S. oil fields and transforming the industry. Today, 90 percent of the wells in the Permian Basin are drilled horizontally, up
(continued on page 2)

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Today, 90 percent of the wells in the Permian Basin are drilled horizontally, up from just 10 percent in 2014. The amount of sand used in the largest wells has soared up to 50 million pounds, up from an average of 3 million four years ago, while water consumption has surged to about 25 million gallons per well, up from about 5 million.

Fracking facts

Sand consumption in largest wells:

2014: 3 million pounds

2018: 50 million pounds

Average water consumption per well:

2014: 5 million gallons

2018: 25 million gallons

Ratio of fracking fleets to drilling rigs:

2014: 1:4

2018: 1:2

Pumping horsepower deployed:

2014: 18 million horsepower

2018 (projected) 19 million horsepower

Source: Industry data

In 2018, there is one fracking fleet for every two drilling rigs, up from one fleet for every four rigs a few years ago. The number of sections, or stages, of a well the get fracked has doubled, from about 25 to 50.

Fracking is powered by fleets of a dozen

or more semi-trucks connected to pressure pumps which increasingly run 24-hours a day, seven days a week. The U.S. record for pressure pumping intensity, set in 2014 was about 18 million horsepower. Already this year, frackers have deployed roughly 15 million horsepower and analysts project it could hit 19 million by the end of the year as new fracking fleets are assembled.

Halliburton, which leads North American fracking market, said it built a handful of new fleets at the end of the last year and is likely to add more. Schlumberger, the world's largest oilfield services company, said it may spend \$100 million to upgrade and unleash 20 fracking fleets recently acquired from Weatherford International, which has its main operations in Houston. "It's just massively increased in a short period of time," said James West, an energy analyst at the research firm Evercore ISI. "It's a big industrialization effort."

The fracker rises - again

That effort is only expected to grow with some 7,000 drilled wells waiting to be fracked, nearly double the number in 2014, when oil prices were still at \$100 a barrel. ProPetro, a Midland oilfield services company, said it could double its number of fracking crews from 10 at the beginning of 2017 to 20 by the end of this year. ProPetro's 17th fracking fleet is about to come online.

Each fracking fleet requires a crew of about 30 people, about 15 for each 12-hour shift. ProPetro has tripled its workforce in less than 18 months, from 400 to 1,200 - all working in the Permian.

"It's pretty unprecedented to add capacity at that pace," said Dale Redman, ProPetro's CEO and co-founder. "It's been an unbelievable transition to watch."

Houston-based Patterson-UTI Energy is known for its drilling, but the company's fracking revenues exceeded 50 percent for the first time late last year. That trend is expected to continue for the foreseeable future as it keeps starting up more fracking fleets, said Mark Siegel, the company chairman.

"Fracking is becoming an ever-more-important expense of each well," Siegel said.

This week, five workers were killed in Oklahoma in an explosion involving a Patterson-UTI rig. Siegel was interviewed

before the tragedy.

Byron Pope, an energy analyst at the Houston investment bank Tudor, Pickering, Holt & Co., suggested that fracking horsepower may become a better indicator of U.S. oil and gas production than the rig count, as companies introduce high-tech rigs that can drill more wells that are longer and closer together. The active U.S. rig count was 936 last week, more than double its recent low of 404 in May 2016, but far below the nearly 2,000 rigs that were operating in 2014.

"The rig count is roughly half the prior peak, but horsepower demand is going to get back above that peak," Pope said. "It's silently outpaced the rig count."

The pivot to fracking was anticipated this year, but the big question now is how much activity might accelerate if oil prices stay near \$65 a barrel compared to \$45 at mid-2017.

Exploration and production companies are expected by analysts to boost spending in U.S. oilfields by least 20 percent this year - likely more - and much of that increase will go to cover the costs of fracking crews working in the Permian Basin and other U.S. shale fields.

"The main issue is oil prices are that much stronger than what everyone was expecting coming into the year," said Bill Herbert, a senior energy analyst at Piper Jaffray & Co. in Houston. "That's huge."

From the Editor:

I hope you enjoy this February 2018 edition of the ADDC Insight. We have tried to combine the best of the DDJ and the Insight. To do so, I need your help! As usual, we will include the monthly letters from our President, the committees, and the Regional Directors. Please send me your articles, event flyers, and anything you'd like to share with other regions and clubs.

Don't forget you can purchase ads to be placed in the Insight. Want to congratulate you new club officers? Want your business to reach over 1400 members across the US and Canada? Buy an ad for the Insight, and help support the Association.

I hope to hear from you soon!

Maggi Franks



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Happy Valentines Day!

Budget and Planning was a very long 2 days. We started on Friday with the review of committee, board and convention reports. We were up at 7 am and worked until 5:00 pm. Saturday we heard from the Financial Review Committee doing the review of the last three years financials. The committee did a great job and were very diligent and went into great detail. Then we reviewed the recommendations of the finance committee, budget approval, and started work on a business plan. We did not stop until 11:57pm. It was a long and hard two days. I am very proud of this board with their dedication and hard work for the ADDC. This year will be very challenging but remember we didn't get here overnight and we can't fix it overnight. I know many of you are looking forward to the Financial Committee review, but the Association was served legal notice from three members requesting detailed financial information as per their November demands. I am currently waiting to hear back from the Association lawyer before we proceed. The Financial Review Committee is working on an overall final report that membership will receive shortly.

Also, at Budget and Planning, there was discussion on the Realignment and the process instructions will be to the clubs and regions soon. The elections for the Region Directors for the new areas will be by mail vote this year. The review and duties assigned to the Vice President Position have been assigned to other areas.

It has been nice to hear back from some individuals about the changes to the Regional Directors letters. Thinking it was a breath of fresh air to read something unique in each area. Lots of things are happening in each area.

The convention committee has also been hard at work planning for everyone's arrival in September. Lots of great ideas coming forward. We will keep you posted.

The ADO office has been moved to West Virginia and all forms are currently being updated.

The board is also working on creating other revenue streams. Advertising and a corporate sponsorship program are being looked at. With membership at a guess of 1200 for this year's budget, we need help!

Stronger communication is this year's goal. The board will be keeping track of hours and donations towards to the association. This will be shared with membership as well.

Have a great month!

Christina Forth



Association of Desk and Derrick Clubs



RE: Sponsorship Opportunities for Regional Desk and Derrick Meeting

The Buckeye Desk and Derrick Club is proud to be hosting the Region I Meeting in Findlay, OH, May 17-19, 2018. In addition to the business meetings, we have outings planned to showcase oil, wind and solar energy with field trips to Marathon Petroleum Corporation, One Energy and the Marathon Petroleum Corporation Energy & Transportation Annex at the Hancock Historical Museum.

The Association of Desk and Derrick Clubs (ADDc), an international non-profit organization is a premier provider of energy education and professional development of individuals actively employed in, affiliated with, or retired from the petroleum, energy and allied industries as well as individuals interested in increasing their knowledge about these industries.

ADDc has clubs and members across the United States and Canada. Region I includes the memberships from Clubs in New York, Ohio, Pennsylvania, and West Virginia. The purpose of the ADDc is "to educate its members, the general public as well as the companies and global communities the members serve about these industries. The Association's motto is "Greater Knowledge — Greater Service."

The Buckeye Desk and Derrick Club invites you to consider a sponsorship opportunity. The attached donation form offers options to support the Region I Meeting at several different levels. All sponsors will be recognized in the meeting program. We ask that your donations be mailed by February 28, 2018. I can be contacted either by phone 419-672-2722 or email jlhammond@marathonpetroleum.com if you have any questions.

The Buckeye Desk and Derrick Club qualifies as a non-profit organization under IRS Code 501 (c)(6). Contributions or gifts may be deductible as a trade or business expense, rather than a charitable donation.

Thank you for supporting Buckeye Desk and Derrick Club and our Region I Meeting.

Sincerely,

Jennifer Hammond
Chairman
Sponsorship Committee

Contributions may be sent to:
Buckeye Desk and Derrick Club
Region I Meeting
539 South Main Street, Room: M-04-104
Findlay, OH 45840

Association Distribution Office • P. O. Box 847 • Bethany, Oklahoma 73008
Phone 405-543-3464
ado@addc.org

Trump administration exempts Florida from offshore drilling expansion after pressure from Republican governor

Decision spurs criticism of special treatment

[Jeremy B White](#) San Francisco

An offshore oil platform is seen in Huntington Beach, California REUTERS/Lucy Nicholson
The [Trump](#) administration has exempted [Florida](#) from a vast expansion of offshore [oil](#) drilling, mollifying the state's Republican governor and angering Democrats.

Continuing its effort to unravel Barack Obama's environmental legacy, the administration announced last week that it would open virtually all offshore waters to oil and gas exploration — a stark reversal of Mr Obama's move to prohibit energy extraction across hundreds of millions of acres of ocean.

While the change drew praise from top Republicans and energy industry officials, it also generated a bipartisan backlash from elected officials in states that border the ocean — among them Florida's Republican governor and senator, who warned of environmental degradation. The state is also home to Mr Trump's opulent Mar-a-Lago club, a frequent destination he has taken to calling the "winter White House".

Acknowledging Florida Gov Rick Scott's concerns, Secretary of the Interior Ryan Zinke said in a statement that national energy policy must incorporate "the local and state voice" and backed Mr Scott's request to block new drilling off his state's coast after meeting with him.

"I support the governor's position that Florida is unique and its coasts are heavily reliant on tourism as an economic driver," Mr Zinke said. "As a result of discussion with Governor Scott's and his leadership, I am removing Florida from consideration for any new oil and gas platforms."

The special treatment drew a furious response from some Democrats who wondered why their states were not given a similar deal.



An offshore oil platform is seen in Huntington Beach, California
REUTERS/Lucy Nicholson

Energy Exposition 2018

Industry Tradeshow and Safety Conference

 May 22-23, 2018

 Loveland, Colorado

Region I Director's Newsletter



Carrie Harmon
Region I Director

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Penney R. Gerdeman
Buckeye

Angie Dotson
Ohio Valley

David Hotchkiss
Oil Heritage

Jennifer Smith
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Cynthia Krebs
Three Rivers

Angel Perry
Tuscarawas Valley

Kathy Tawney
West Virginia



Have you heard the expression "Love Is in the Air?" This February, that is definitely the case. I thank Angel Perry for spotlighting a member from Tuscarawas Valley. I also thank Angie Howard for her years of dedication to her club and ADDC!

"This month for our first member spotlight, I would like to feature Angela Howard, our founding Charter member.

Angie was born in the Dover Ohio area in 1947. She began working as a salesclerk for Montgomery Wards in 1963. After graduation, she moved to Pittsburgh to pursue a nursing career, after realizing that field wasn't for her, she moved back to the Dover area and returned to Montgomery Wards where she was promoted to a credit manager and remained until 1976 when she started working for the City of New Philadelphia as Assistant Service Director.

Angie's first job in the oil industry was with a newly formed oil and gas division of Republic Steel Corporation (RSC Energy), where she was hired in as a land administrator, knowing nothing about the oil and gas industry. With the support of RSC, she founded the Tuscarawas Valley Desk and Derrick Club in 1982. She also went around to area schools and presented "Petro Molly and Her Magic Suitcase". After leaving RSC in 1989, Angie worked for various oil and gas companies including, Langasco Energy, Resource America, Belden & Blake, Enervest, and finally retiring from Gatherco in 2015.

In addition to founding the Tuscarawas Valley Desk and Derrick Club, Angie was the Region I Director in 2004, and was influential in helping to start the Ohio Valley Club in 1981 and the West Virginia Club in 2005. Angie also started the Greater Appalachian Basin Association of Lease and Title Analysts (GABALTA), a charter club of NALTA.

Angie was inducted into the Ohio Oil and Gas Association Hall of Fame in 2014, where she has been a member since the 1980's. Angie has volunteered with OOGA working the registration booths since 2001 at the various meetings and expos they have throughout the year.

In her spare time, she was also one of the founders of the Tuscarawas County Italian American Festival serving as President in 1993. After moving to the Canton area, she was on the Board of Directors for the Stark County Italian American Festival.

Angie is still very active in the club today. With her fair share of health issues the past few years, she still makes it to every meeting that she is able, even if she is chauffeured.

So, as you can see, we have a lot to be thankful for to Angie, without her, we wouldn't be the club we are today."

Written by Angel Perry

Until next time, let your voices be heard!

Carrie

Region II Director's Newsletter



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Tri-State Desk and Derrick
Club
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February 2018

I just attended the ADDC Budget and Planning Meeting held in Tulsa, Oklahoma. It is a learning experience to be a part of the ADDC Board and I cannot express enough respect and appreciation for those members who have dedicated their time to sit on this Board. We worked two long days discussing our future with the Association and we had to make some tough choices with the Year 2018 budget. We also discussed the realignment and the steps we will need to take to merge Region I and Region II. I also spent time with Carrie Harmon, Region I Director making plans for our future together. We are both very excited about new educational opportunities, new friendships, and more places to visit as the new "Northeast Region"!

MONTHLY SPOTLIGHT - KATHY BICKEL

Kathy Bickel has been a member of the Bay Area Desk and Derrick Club for 29 years. She has held every position within her club and was the Year 2016 Regional Director. She is employed with Mosbacher Energy Company. I asked her why she joined Desk and Derrick and her reply was "There were no organizations for women in the oil and gas industry. It was a great way to network and meet other people who worked in the industry. Remember...this was an era of no cell phones and social media! Today, we may be able to get the same information off the internet, but the networking, social contacts, and friendships are what keep me coming back." I asked her what she gained from being a member, and she said "So much! The education you learn from speakers, and different facets of the industry to help in your position are invaluable! Attending Region Meeting and Conventions have led to lifelong friendships that mean so much to me. Even though each state is different, we all face the same challenges with regulations, drilling permitting, land and leasing, and production. We are united in a common cause - promoting the oil and industry." "As a member of Desk and Derrick, we share a common goal, increasing our knowledge in the oil, gas and energy industry. As we move forward with Desk and Derrick in these trying times, I wouldn't change my involvement at all with this great organization!" As for hobbies, Kathy admits to being addicted to HGTV and loves gardening! She is also a "sun lover", and enjoys the summer sunsets and hanging out with friends and family, in her words, PRICELESS! She has been married to her husband, Bruce, for 38 years. They met in college where both were enrolled in the Petroleum Technology Program. She said "I just wanted to meet guys, who knew I would marry one of them!" They have two sons and three grandchildren.

Kathy has always been very supportive and encouraging to me about Desk and Derrick when I was club president. Of course, it didn't take long, before she asked me if I would be interested in being a Regional Director. I replied "in a few years" and here I am!

Mark your calendars for the Region II Meeting to be held Thursday, April 26 - Saturday, April 28, at the Otsego Club Resort and Alpine Village in Gaylord, Michigan. Betty Wajda and the Bay Area Desk and Derrick Club are planning an educational, fun, and exciting time in Gaylord! It is definitely one not to miss. Be on the lookout for the registration packet which should be out very soon!

Beth Etzkorn

Start by doing what's necessary; then do what's possible; and suddenly you are doing the impossible.

~Francis of Assisi

Region III Director's Newsletter



Carol Schiavone
Region III Director

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Lois Folse
Baton Rouge

Eugenia Palculict
El Dorado

Kathy Martin
Lafayette

Jessica Wade
Laurel

Charlotte Ratcliff
Morgan City

Kathy Gowland
New Orleans

Sheryl Cole
Red River

Angie Duplessis
Westbank



February, 2018

Dear Region III Members:

Ah, February – the month of love. Love for each other and especially love for this organization that has survived for so many years thanks to the hard work, dedication and blood, sweat and tears that goes into our continually striving to keep Desk and Derrick alive and a viable part of the oil and gas industry. In huge part were the many long hours of work that the board dedicated to the Budget and Planning meeting held January 18th and 19th held in Oklahoma. Although I could not attend in person, due to illness and the untimely mix of winter weather experienced all over the region, I can attest that much was discussed and accomplished. Our President, Christina Forth, will be putting out a letter as to what the outcome was for your benefit in the very near future.

By now all clubs should have received their renewal forms and should be completing them to turn in by February 28th. It is very important that we get them in timely.

A Nominating Committee is being created which will include two members from Region III and two from Region IV Clubs that will be merging into the newly formed Southeast Region. As soon as this committee has been named the info will be delivered immediately to each club president. Please consider running for Director 2019.

Useful tools are out there for your use – take advantage of checking out INSIGHT and the many items of information on our Website. Remember – if we don't use it – we lose it!!!

Lastly but most importantly – have you made your plans yet to attend the Region III meeting in Metairie, Louisiana. It's not too early and we would love to see you there.

HAPPY VALENTINE'S DAY & HAPPY MARDI GRAS TO ALL!

Carol Schiavone

Region IV Director's Newsletter



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February 2018

The ADDC Board of Directors met in Tulsa, Oklahoma for the Annual Budget and Planning Meeting, January 19-20, 2018 and it was an honor to represent Region IV. It was an extremely productive and long meeting; setting goals and taking care of the Association Business and I hopefully made some very long-lasting friendships.

On Saturday, February 17, 2018, I will host our Region IV President's Meeting; Presidents, Vice Presidents, Region IV Committee Representatives and ADDC President-Elect will gather for a one-day meeting. This will be a time to share ideas and goals for our Region for this year. If you have any concerns or ideas of anything, that you want your President to share at the meeting, please let me know.

Our Region IV Meeting, this year is April 18 – 21, 2018, in Graham, TX. The Graham Club and myself are looking forward to you coming. The Region IV Meeting will be held at "The Wildcatter Ranch"; "The Resort Ranch on the Texas Range". The registration information will be coming soon, and we are looking forward to an exciting time.

This month I want to "highlight" one of our Region IV Club Presidents, Kathy Johnson. Kathy is a member of the San Antonio Club and has been a member of Desk and Derrick since 2010. Kathy works for Andeavor, formally Tesoro Corporation, and is the Senior Manager, Special Projects. Kathy has a "can-do attitude" and no job is too large or small for her. She has held several offices on the board throughout her tenure with the club and this year she is the President, again, after serving as Board Advisor, for the last three (3) years. Thank you, Kathy, for your devotion and commitment to Desk and Derrick Club throughout the years, you are very much appreciated.

As always, if you need me – I am here for you. I am easy to reach by phone, e-mail or text. I will try, to the best of my ability, to find out what you need if a question or concern arises, no matter how insignificant you think it might be – I will get an answer for you.

Sue Weaver

"Success is not final; failure is not fatal: It is the courage to continue that counts."

– Winston S. Churchill

Total, Chevron declare major oil find in the Gulf of Mexico

By [Daniel J. Graeber](#)
Jan. 31, 2018 at 7:40 AM

The French company said Wednesday it's the largest discovery it's ever made in the region. Using a floating drillship, French energy company Total and U.S. supermajor Chevron announce a major new oil discovery in the U.S. Gulf of Mexico.

Jan. 31 (UPI) -- French energy company Total said Wednesday it made what it considers the largest discovery it's ever made in the U.S. waters of the Gulf of Mexico. Total said Wednesday it ran through a deep column of oil while drilling in its Ballymore prospect in the eastern U.S. waters of the Gulf of Mexico. In declaring the discovery, the company said it was already considered a commercial prospect.

"Ballymore is the largest discovery by Total in the prolific Gulf of Mexico and bolsters our new exploration strategy put in place since 2015," Kevin McLachlan, a senior vice president for exploration at Total, said in an emailed statement.

Chevron is [the operator](#) with a 60 percent interest in the prospect. Both companies said drilling was progressing to confirm the full potential of the discovery about 75 miles off the coast of Louisiana. The initial well was drilled using a floating drillship.

In September, Total said it was



Photo courtesy of Chevron

able to capture [more opportunities](#) in the Gulf of Mexico through an agreement with Chevron in a deal that gave it between 25 percent and 40 percent of the interest in several fields.

The U.S. government said it expects total production from the Gulf of Mexico to average 1.7 million barrels per day this year and increase by another 100,000 barrels per day in 2019 on expectations of the start up of new fields. The U.S. Gulf of Mexico accounts for about 17 percent of U.S. oil production and 5 percent of the natural gas. Analysis published earlier this month by consultant group [Wood Mackenzie](#) said some deepwater assets in the U.S. Gulf of Mexico can break even with a price of oil below \$50 per barrel, making them somewhat more competitive than shale.

ADDC NEEDS

YOU!

There are still committees that need regional representatives!

Do you have an hour a month to spare? That's all it takes.

Some committees take less time than that. You can make a difference by volunteering.

Contact your Region Director today or any Board member and step up to help the Association!





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Maggi Franks
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PARLIAMENTARIAN
Marilyn Carter

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Casi Nichols
Spar Services LLC

REGION VII DIRECTOR
Tracy Fillmore
Canadian Natural Resources Limited

Judi Adams
Rules Committee
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504-407-7443 (M)
Email: dandd.judi@gmail.com
Website: www.addc.org

TO: All Club Presidents
FROM: 2017 Rules Committee
SUBJECT: REMINDER: Proposed Amendments to Bylaws and/or Standing Rules

In accordance with Article XXVI-Amendments, Section 1 (a) "...the proposed amendments are submitted in writing to the Chairman of the Rules Committee by an Association Officer, the Board of Directors, the Rules Committee, or a club prior to a deadline date set by the Board of Directors, such date not to be less than ninety (90) days prior to convention, and..."

The deadline to submit proposed amendments to the ADDC Bylaws and/or Standing Rules to the Rules Committee for presentation to the delegates at the 2018 ADDC Convention is **Thursday, February 15, 2018**. (This is two weeks past the original deadline of February 1, giving clubs and the Board additional time to discuss, comment on, and submit any proposed amendments.)

If your club wishes to propose a change, please use the **Rules 1** form (posted with this letter and in the Forms section of the ADDC website). If you or your club wishes to discuss the proposals before they are submitted, please feel free to call or email me.

It is very important to include all information on the form, especially the Article number or Standing Rule number as it now reads, and then state the wording you are proposing.

Please send the **Rules 1** form with any and all proposed amendments to the ADDC Bylaws and/or Standing Rules to me at the above address or email address by the February 15th deadline. It must be postmarked or e-mailed by that date to be considered.

NOTE: Be sure to follow up after sending the proposed amendment(s) with either an email or phone call to be sure I have received them.

Judi

Judi Adams

Copy: Christina Forth, ADDC President
Terry Ligon, ADDC President Elect
ADO Manager
2018 Rules Committee

Region V Director's Newsletter



Andrea McGarrah
Region V Director
andrea-mcgarrah@ogresources.com

Abilene

Kaye House
Amarillo

Tammy Ranknin
Artesia

Bakersfield

Farmington

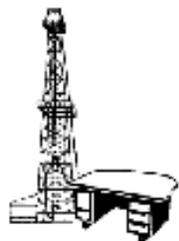
Lea Spurlock
Midland

Pampa

Ellie Gallagher
Roswell

San Angelo

Barbara Pappas
Wichita Falls



ASSOCIATION OF
DESK AND DERRICK
CLUBS

Member Interview Ingrid Burton, Desk and Derrick Club of Midland

Introduction:



Hello, I am Ingrid Burton. One day in 2010 I was assisting a short-handed catering company as a favor to the Catering Manager; the event turned out to be for . . . Desk and Derrick! A friend of mine was a member and invited me to a meeting. I gladly accepted as I was a Desk and Derrick scholarship recipient back in the dark ages when I lived in Hobbs, New Mexico.

My Desk and Derrick background includes Committee Chairman of several committees, attending several Region Meetings, attending several ADDC Conventions, assisting with a Region Meeting and an ADDC Convention, a Region 1st, 2nd, and 3rd place AIMEE winner, President, and Deserving Dame winner (I believe now it is called Annual Achievement Award). I am currently serving as my Club's Vice President and as Bulletin Committee Chairman.

I am also a volunteer with Uptown Midland Business Professional Women, serving as Secretary and Reservations, and with Texas Christian Junior Bull Riders, assisting with ticket sales.

My educational background consists of an Associate of Science, an Associate of Applied Science, and a Bachelor of Science. I also have a Secondary Education certification with a major in Math and a minor in English. I was a member of Phi Theta Kappa Honor Society, and the Outstanding Graduate of Mathematics from UTPB.

My work background includes Associate Reservoir Engineer, Administrative Assistant, Geology Technical Assistant, Secondary Education Math Teacher, and Field Tech. I am currently with a great company, Laredo Petroleum as a Production Engineer Tech. I also manage two businesses, one is an anti-aging company and the other helps people cut expenses and increase income.

And yes, I am as old as the hills and a proud member of AARP – I love discounts!

Greatest D&D Moment:

I believe my greatest moment was really a year. I was told I was going to be 2015 President and did not feel qualified as my only Board experience was a Director five years earlier. However, I cannot express in words how blessed I was for accepting this position. It was not at all as hard as I imagined it would be, it was a lot of fun, and I learned a lot. I strongly urge everyone to try this position at least once.

Region VI Director's Newsletter



Casi Nichols
Region VI Director

region6rd@yahoo.com

Wendy Simon
Butler County

Tammy Watkins
Enid

Pam Hitz
Great Bend

Jamie Sabata
Liberal

Michelle Burgard
OKC

Susan Bullard
Red Earth

Dorothy Lenhart
Tulsa

Abby Bock
Wichita

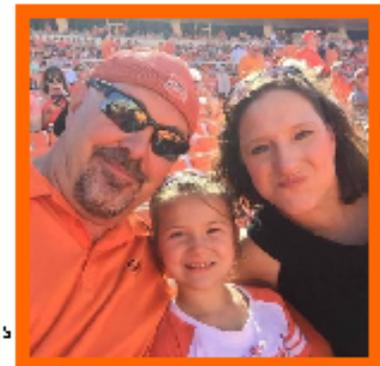
February 2018

Hello Region VI!

I hope this letter finds you all well and moving steadily and strongly into your 2018 year! Just a few reminders:

- Membership renewal forms are due by the end of this month, so be sure to get them submitted to ADO.
- Region Director Nominations for 2018 should be submitted to Wendy Sparks no later than February 24". Please consider stepping up to serve your organization.
- March is Desk and Derrick Awareness Month so be sure to use this opportunity to highlight your club and the Association.
- Budget and Planning went well, and your Board members spent many long hours planning for a successful 2018. Remember that the board is full of volunteer members such as yourself and we are here to serve you. So, reach out with those ideas and recommendations. The official budget and audit committee results will be sent out to the membership soon.
- There are still a few open spots on the ADDC committee list, so take time to review the vacancies and determine where you can serve.

As Region Director, I am here to serve as the liaison between the clubs and members of this region and the ADDC board. It is my job to make sure Region VI has a voice and understands everything that is happening from the Board level. So be sure to speak up and ask those questions!



Name: Tara Woods
Current City: Edmond, OK
Home Club: Oklahoma City, OK
Office(s) Served: Club Secretary for 3 years, Club VP for 1 year, Club Industry Activities Chairman for multiple years
Year Joined ADDC: 2005

Current Job: Operations Data Specialist with Chesapeake Energy

A little bit about you: I am a wife, a mother and a cancer warrior. I have been in the Oilfield for 16 years.

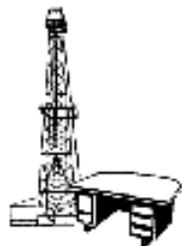
Fun Fact: I competed nationally in Ranch sorting.

Goals for 2018: Become a cancer SURVIVOR instead of a cancer patient.

Leave us with a quote or a bit of advice: "Always wear a smile."

*Tara has been an integral part of the OKC D&D club since she became a member 12 years ago. She has organized and planned many of our golf tournaments and help us make money then so we can stay viable in this down turn. She is a trainer and motivational speaker at her job. Not only does she spend her time juggling work and club duties, her family owns a ranch and they rodeo on the weekends. She's handling her recent diagnosis of colorectal cancer as she handles everything, with courage, positivity, and a relentless drive to succeed."

- Wendy Sparks, OKC



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Canadian oil exports by rail increasing

By [Daniel J. Graeber](#)

Jan. 30, 2018 at 8:30 AM

Canadian oil exports by rail are at highs not seen since 2014, federal data show. Jan. 30 (UPI) -- With Canadian crude oil production up slightly, and given infrastructure limitations, federal data show oil exports by rail at a historic high. The National Energy Board, the Canadian regulator, reported total oil exports by rail averaged 139,754 barrels per day [in November](#), the last full month for which data are available. Nearly all of the oil exported from Canada heads to the U.S. market and, for the week [ending Nov. 10](#), the four-week moving average for exports south was 3.1 million barrels per day.

NEB data show the November average for exports by rail was the highest since November 2014, when the average was 150,960 barrels per day. The November 2017 average was 16 percent higher than the previous year. Total Canadian crude oil production for that month was about one-tenth of a percent higher than the same time last year, or about 7,100 barrels per day, and that oil needs to have someplace to go.

In November, pipeline company



File photo by Steven Frame/UPI

TransCanada closed down its Keystone network from Alberta after reporting [a release](#) of about 5,000 barrels of oil in rural South Dakota. The pipeline has been operating at about 80 percent of its full capacity since then.

Even still, federal Canadian data show exports by rail for October 2017 was, at an average of 136,531 barrels per day, about 30,000 barrels per day higher than the previous year.

An accelerated rate of crude oil production in North America started straining existing pipeline capacity at least four years ago, forcing the industry to turn to rail transport to take up the slack. In July 2013, 47 people died in Lac-Mégantic, Quebec, when a train carrying oil from the Bakken shale formation derailed and exploded. Canadian transport officials introduced [new regulations](#) in the wake of the disaster aimed at increasing

safety on the Canadian rail system. The measure from regulator Transport Canada started with an order to remove around 5,000 tanker cars designated DOT-111 from service almost immediately. Sandy Fielden, the director for oil and products research at Morningstar, said in [a report](#) it may be mid-2019 before new pipelines are in service in Canada, leaving rail as the mid-term stop gap, but the fleet of tank cars might be the limiting factor.

"The railroads are reluctant to commit resources to rail shipments that may quickly fizzle out when pipelines are built or expanded," he added.

Federal Canadian data show that, between January and October last year, oil shipments by rail were up 59 percent from the same period in 2016.



Disney's Contemporary Resort, Lake Buena Vista, FL

CONFERENCE
June 24-28, 2018

EXHIBITION
June 25-27, 2018

Exxon Mobil will triple production in the Permian basin, the hottest US shale oil field, by 2025

[Tom DiChristopher](#)

Published 12:52 PM ET Tue, 30 Jan 2018 Updated 4:58 PM ET Tue, 30 Jan 2018 CNBC.com



Brittany Sowacke | Bloomberg | Getty Images

A worker prepares to lift drills by pulley to the main floor of a drilling rig in the Permian basin.

[Exxon Mobil](#) on Tuesday said it will triple its production of oil and chemical feedstocks in one of the most productive shale basins in the United States and expand infrastructure to bring those products to market by 2025.

The announcement came one day after the world's largest publicly listed oil company said it would [ratchet up its U.S. investments to \\$50 billion](#) over the next five years, in part due to the benefit of recent U.S. tax cuts.

The Irving, Texas-based oil major said it plans to increase total daily production in the U.S. Southwest's Permian Basin by 600,000 barrels of oil equivalent, a measure of

crude, natural gas and other product output. In 2016, Exxon's total output was 4.1 million barrels of oil equivalent per day.

Exxon expects crude oil production alone to increase five-fold in the Permian, which runs beneath western Texas and eastern New Mexico. Last year, Exxon [doubled its Permian holdings](#) through the \$5.6 billion acquisition of companies owned by the Bass family.

"Our geographic and competitive advantages in the Permian position the company for strong growth and long-term value creation," Sara Ortwein, president of Exxon's shale oil and gas subsidiary XTO Energy, said in a statement. "We can deliver profitable production at a range of prices, and we have logistics and technology advantages over our competitors."

[Exxon Mobil to invest more than \\$50 billion in the US over 5 years](#) 3:31 PM ET Mon, 29 Jan 2018 | 00:58

The oil giant also plans to spend \$2 billion to expand infrastructure to bring oil and feedstocks to market. Bottlenecks have emerged as a concern in the Permian as drillers packed into the basin in recent years to take advantage of its low-cost production during a prolonged oil price slump.

U.S. shale drillers use advanced technology such as horizontal drilling and hydraulic fracturing to wring oil and gas from rock formations. Oil companies have driven down the cost of the process and can quickly start and shut production from shale wells, giving them flexibility when crude prices sink. Exxon plans to expand the Wink, Texas, crude oil terminal it acquired in October in order to bring its production and third-party oil

from the Permian to the Gulf Coast refining and export hub.

The growing production will provide a cheap feedstock to three of Exxon's Texas refining and chemical plants and another facility in Baton Rouge, Louisiana, the company said.

Byproducts from oil and gas drilling are the inputs for chemicals such as polyethylene, the most commonly used plastic in manufacturing. The petrochemicals segment is a major growth area for oil companies such as Exxon, in part due to surging use of plastics in developing nations.



Last year, Exxon said it would invest \$20 billion to build chemical, refining, lubricant and liquefied natural gas facilities along the U.S. Gulf coast.

Exxon is scheduled to announce fourth-quarter 2017 and full-year earnings on Friday morning. Shares of the company were down nearly 1 percent at about \$87 on Tuesday. The stock is up 2.8 percent over the last year, lagging other integrated oil companies.

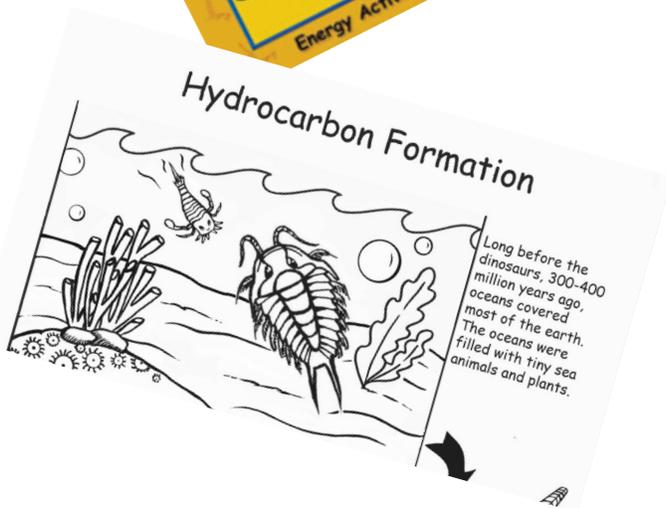
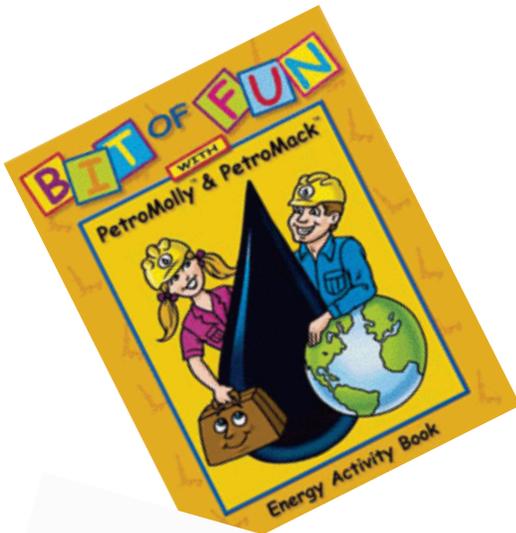


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for details!
ado@addc.org



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REGION VII DIRECTOR

Tracy Fillmore
Canadian Natural Resources Limited

Wayne Ammons
Business Manager

Association of Desk and Derrick Clubs
Association Distribution Office
P.O. Box 777
Jane Lew, West Virginia 26378

Phone (405) 543-3464

Email ado@addc.org
Website www.addc.org

2018 is off to a great start! We have new leadership within the association and your Board is working hard to help all of you grow as members and to secure ADDC will continue to be the leading educational and networking organization within the energy industry.

The annual Budget and Planning Meeting was held in Tulsa on January 19 - 20. Watch for meeting highlights to soon be available on our website. Your Board of Directors discussed many ideas to move the organization forward and to keep the ADDC strong and viable for many years to come.

The Association Distribution Office (ADO) moved from Oklahoma City to Jane Lew, West Virginia, January 22 - 28, and reopened on Monday, January 29. Your patience during the move was great! I am still going through boxes and email messages. As a result, setting up and organizing the office remains a daily task. Your continued patience is greatly appreciated.

The **new** ADO postal address is

Association of Desk and Derrick Clubs
Association Distribution Office
P.O. Box 777
Jane Lew, West Virginia 26378

The ADO main phone number remains (405) 543-3464. I have updated all applicable webpages on our websites in order to alleviate any confusion going forward. I am working on updating all forms on the Association and regional websites. Once I have updated all forms, I will provide an update to you via another early-2018 Business Manager newsletter. Again, your forthcoming patience during the transition is greatly appreciated.

Mike Gray has accepted our request to be our registered office in Oklahoma. The address is

Association of Desk and Derrick Clubs
c/o Michael S. Gray, CPA
Tulsa, Oklahoma

The Convention photos are finally available for purchase. You may find a link for purchasing the photo CD within the *Members* area, under *30th Mailing*.

Regional meetings are coming together and the registration packets for these meetings will be posted on our website as soon as they are available. I can assure you that Region Directors and GACs in every region are working hard to make the regional meetings a huge success. You will not want to miss them. Make your hotel, travel and meeting registrations early so you do not miss out on the wonderful opportunities each and every regional meeting will have to offer.

We are looking for 2018 membership renewals and other annual submissions. Could you please gather and submit your 2018 membership renewals, following the instructions that were included in our October email distribution that contained your club's 2018 membership renewal forms. For any clubs that have not yet done so, could you please submit your *New Club Officers Form* (ADO31) and your 2018 club meeting schedule.

Should you ever require information or assistance, please do not hesitate to contact me. I am here to help!

Sincerely,

Wayne Ammons
Business Manager

Region VII Director's Newsletter



Tracy Fillmore

Region VII Director
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Canadian Natural Resources
Limited

Naomi Reid

Alberta Foothills President
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Suncor

Evelyn Black

Edmonton President
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Retired

Wanda Guenther

Grande Prairie President
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Tracy Fillmore

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403-837-8720 C
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As I was thinking of who to profile for this month's letter, the idea of second time around Presidents popped into my head, so with that in mind the next person is Wanda Guenther of the Grande Prairie Desk and Derrick Club. A big thank you to Wanda for stepping forward for a second time!!

Wanda Guenther was born and raised Prince George, BC until the age of 14. Her father moved the whole family to Nanaimo, BC upon her starting Grade 9. There she finished her high school education in 1978 with her grade 12 diploma. In 1979 she headed for Grande Prairie, AB to gain employment. After several years she met her husband (Peter) and was married six months later. At which point she decided to continue her education and enrolled in Grande Prairie Regional College to obtain her Office Administration Diploma. This would be beneficial for the future jobs and four businesses (Oilfield Rentals, Snubbing and Hot Oilers & Frac Fluid Heaters) that she and her husband owned and operated together. Wanda has also worked for other companies not related to the Oil and Gas Industry. She worked as a teaching assistant for a school in northern Alberta, taught one year of kindergarten at a Christian school in Edson, worked for a highway maintenance company and a pipeline company. At present Wanda operates her own bookkeeping service.

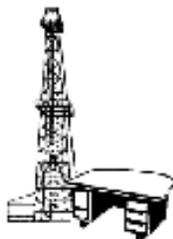
Wanda joined Desk and Derrick in 2013, while owning and operating their last business venture, Aureus Energy Services, which they sold to their partner. She has served all five years on the Grande Prairie Desk and Derrick executive as Treasurer, Vice President and on her second term as President. Wanda is also active on the Board of "STARS" to raise funds for the Grande Prairie Base.

Wanda has been married for 35 years and has two daughters, Karin (33) & Kristy (31) and one son-in-law (Hugh) whom is married to her oldest daughter. Her dogs Sammy and Harley are a big part of her life. In her spare moments she enjoys reading, watching movies and spending time with family and friends.

Wanda loves the comradery of the club especially when they are volunteering to help at events such as the annual Oilmen's Bonspiel & STARS Hangar Dance and a new project of helping the Seniors.

Events coming up: Jan 16-18, at Hilton Americas-Houston; Argus Americas Motor Fuels Summit
Jan 20, at BMO Center, Calgary; 2018 PSAC Stars and Spurs Gala
Jan 23, at University of Calgary Downtown Campus; CAPP Seminar: Saskatchewan Production Accounting: Start to Finish, Including What's New!
Jan 24, at Calgary Public Library; CAPP – Town Hall
Jan 25, Alberta Energy Efficiency Alliance is hosting a Lunch and Learn from 11:30 to 1:00 at SAIT if you can attend in person or On-Line. The topic will be Energy Efficiency and the Utilities Systems, presented by Julia-Maria Becker with the Pembina Institute, Priority Director. Tickets needed
Feb 5-6 at Westin, Calgary; Alberta & Saskatchewan Renewable Energy Financial Summit 2018
Feb 6 at The Bow, Calgary; 2018 Energy New Venture Pitch
Feb 9 at Calgary Petroleum Club; Managing Cyber Risk for Executives
;ay 16-17 at Grey Eagle Events Centre; Alberta Energy Efficiency Summit

Tracy Fillmore – Energize – 2018 Region VII Director



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The *D&D Standard Oil & Gas Abbreviator* is an indispensable tool for anyone working in oil and gas or other energy industries, for students pursuing courses of study related to the industry, and for employees of allied industries. The book is available from The Desk and Derrick Club of Tulsa through Gaye Marrs, gmarrs@cimarex.com or 918-295-1677. Cost is \$40 to members and \$45 to non-members, plus \$5 for shipping, if necessary.

In Colorado, a glimpse of renewable energy's insanely cheap future

Even with storage, new renewables beat existing coal.

By [David Roberts](#)
Jan 16, 2018, 2:00pm EST

[Shutterstock](#)

This month, energy nerds are very excited about a utility bid solicitation. Wait, hear me out. It really is exciting! Usually, when we talk about how renewable energy will evolve in the next five years, we rely on analysts and projections. This is different. When a utility puts out a request for proposals (RFP) — asking developers to bid in for the chance to build new energy resources — the developers who respond aren't guessing, or boasting. They are laying down a marker that might get called. They are promising only what they are confident they can deliver.

That makes the responses to an RFP a clear snapshot of the state of the industry, relatively unembellished by ideology or public relations spin. This particular snapshot reveals that, on the

ground, renewable energy costs are falling faster than even the most optimistic analyst had projected.

(Let's face it: In most areas of life, when you look past the hype at the real numbers, it's depressing. Renewable energy is one area where that typical dynamic is diverted. The closer you look, the better the news gets!)

Colorado's biggest utility seeks lots of new renewables

First, a brief bit of backstory. The utility in question is Xcel Energy, Colorado's biggest, which serves 3.3 million electricity customers in the upper Midwest, Colorado, and New Mexico.

In 2016, Xcel released its [Colorado Energy Proposal](#), which was news in itself. [1/18/18: see clarification at bottom of post.] The proposal would shut down two coal plants in the state and replace their output with roughly 700 MW of solar, 1 GW of wind, and 700 MW of natural gas by 2023. That would put Xcel's Colorado energy mix at roughly 55 percent renewables. (Xcel's reasons for ramping up renewable energy are [complex](#) — part price, part taking advantage of federal tax credits, part public sentiment.)

Based on that plan, in 2017 the Xcel subsidiary Public Service Company of Colorado issued an "all-source solicitation," which amounts to the utility saying to private developers: "Here's



how much new power by 2023 we need. Whatcha got?"

At the very tail end of last year, while everyone was busy with the holidays, the company quietly issued a [report](#) on the results.

They were mind-blowing. An unprecedented number of developers came forward, eager to build renewable energy and eager to couple it with energy storage, all at unprecedented prices. It seems the people building this stuff are more confident than the analysts writing reports on it.

In Colorado, new renewables are cheap as hell, even with storage

Here's a high-level overview of the bids and projects received in response to the RFP:

[Xcel](#)

This is about as striking as spreadsheets get.

First, the scale!

Xcel says that its 2013 all-source solicitation yielded 55 bids. The 2017 equivalent received 430 individual bids, for 238 separate projects.

(Sometimes developers bid multiple times on a single project, with different combinations of financing, timeline, etc.)

A total of 350 of the bids involve renewable energy (134 for solar alone), representing more than 100 GW of capacity. Developers are chomping at the bit to build this stuff — partly to claim expiring federal tax credits, partly to claim market share in a booming sector, and partly just because they are human beings and excited about clean energy.

Second, the storage!

The [big knock](#) against wind and solar power is that they are variable — they come and go with the weather; they

RFP Responses by Technology

Generation Technology	# of		# of		Median Bid	
	Bids	Bid MW	Projects	Project MW	Price or Equivalent	Pricing Units
Combustion Turbine/IC Engines	30	7,141	13	2,466	\$ 4.80	\$/kW-mo
Combustion Turbine with Battery Storage	7	804	3	476	6.20	\$/kW-mo
Gas-Fired Combined Cycles	2	451	2	451		\$/kW-mo
Stand-alone Battery Storage	28	2,143	21	1,614	11.30	\$/kW-mo
Compressed Air Energy Storage	1	317	1	317		\$/kW-mo
Wind	96	42,278	42	17,380	\$ 18.10	\$/MWh
Wind and Solar	5	2,612	4	2,162	19.90	\$/MWh
Wind with Battery Storage	11	5,700	8	5,097	21.00	\$/MWh
Solar (PV)	152	29,710	75	13,435	29.50	\$/MWh
Wind and Solar and Battery Storage	7	4,048	7	4,048	30.60	\$/MWh
Solar (PV) with Battery Storage	87	16,725	59	10,813	36.00	\$/MWh
IC Engine with Solar	1	5	1	5		\$/MWh
Waste Heat	2	21	1	11		\$/MWh
Biomass	1	9	1	9		\$/MWh
Total	430	111,963	238	58,283		

are not “dispatchable.” Critics say their low prices are misleading, because they must be backed up by “firm” capacity that can be turned on and off at will.

One way to make wind and solar more firm (ahem) is to attach storage, which can store excess production during the day when it’s cheap and sell it into the system at night when it’s more valuable. Storage extends the range of hours a renewable energy project is able to operate.

The problem is that adding storage adds considerable cost. But the Xcel bids show that is changing. The median bid for a wind project was \$18.10/MWh; the median for wind+storage was \$21, just three dollars higher. The median bid for a solar PV project was \$29.50/MWh; the median bid for solar+storage was \$36, just seven dollars higher. (Keep in mind what median means: Half the projects bid cheaper than this.)

Wind+storage in Australia — and, soon, Colorado. [Tesla](#) Here are a few comparisons to help put those numbers in perspective: According to [Carbon Tracker](#), based on these bids, new wind+storage energy in Colorado is cheaper than energy from the state’s existing coal plants; solar+storage energy is cheaper than 75 percent of the state’s coal energy. This is worth repeating, because it’s a significant milestone: In Colorado, getting energy from *new* renewable energy projects with storage is cheaper than getting it from *existing* coal plants. Coal is [dead](#).

The cheapest previously known solar+storage price in the US was \$45/MWh, in a [PPA signed by Tucson Electric last year](#). The median Xcel bid for solar+storage beats that by \$9.

For the Tucson project, storage added about [\\$15/MWh to the cost of the solar](#). Compare that to the \$3 to \$7 added by storage in the Xcel bids. Storage prices are [plunging](#), and as they do, renewables become more competitive.

The financial advisory firm Lazard issues a much-watched analysis each

year of the “levelized cost of energy (LCOE),” a measure that purports to directly compare energy sources based on total costs. Its 2017 [analysis](#) estimated that solar+batteries has an LCOE of \$82/MWh. You might notice that the median Xcel bid for solar+storage is *less than half that*. (Important caveats: The Lazard LCOE is for solar with 10 hours of storage, but we do not yet know how much storage is involved in the Xcel bids; Lazard estimates unsubsidized costs, while Xcel projects will benefit from federal tax credits; Lazard’s estimate is for 2017, while developers are effectively bidding 2023 costs. Direct comparisons are difficult. Point is, the number is vaulting down.)

Renewables just keep outpacing expectations

Colorado has excellent solar and wind resources, but it isn’t the only place where real-world bids are racing ahead of official estimates like Lazard’s. Saudi Arabia recently saw bids for utility-scale solar at [under \\$20/MWh](#), which is less than half Lazard’s lowest estimate for the range of solar LCOE (\$46/MWh).

At an auction in Chile last year, a solar+storage project [won at \\$34.40/MWh](#), which is a third lower than the lowest Lazard LCOE estimates for *solar alone*.

A company called ViZn Energy Systems, which uses flow batteries rather than lithium-ion, is [promising](#) \$27/MWh solar+storage by 2023, when the Xcel projects are scheduled to be online. By comparison, Bloomberg New Energy Finance [projects](#) an average LCOE of a little higher than that for solar alone in 2030.

What broad averages like LCOE can obscure is that the value of renewable energy (and storage) varies widely from place to place and market to market. In places with competitive procurement of energy (still a minority of energy markets in the world) and good renewable resources, renewables are crushing fossil fuels, [even natural gas](#). Every market like that is a leading wedge, allowing the industry to scale up faster and drive down costs in other markets. This drives a self-reinforcing

cycle that analysts looking at averages miss.

That helps explain why reports that focus on real-world projects (“bottom up” reports) tend to be so bullish on renewables. For instance, the [latest report](#) on renewable energy costs from the International Renewable Energy Agency (IRENA), drawing on 15,000 data points from projects around the globe, concludes that by 2020, “all the renewable power generation technologies that are now in commercial use are expected to fall within the fossil fuel-fired cost range.” That’s only two years away!

The Xcel RFP in Colorado is a relatively small signal, but it is one of many sending the same message: renewable energy is not “alternative” any more. Costs are dropping so fast it’s difficult to keep track. It is the cheapest power available in more and more places, and by the time children born today enter college, it is likely to be the cheapest everywhere. That’s a different world.

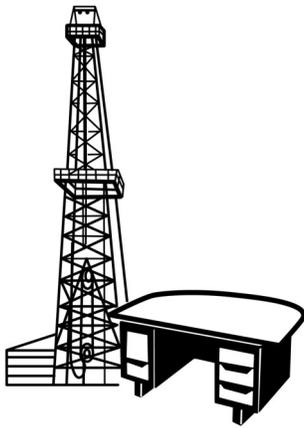
Clarification, 1/18/18: I simplified this, perhaps to the point where it is misleading.

As part of its Electric Resource Plan (ERP) proceeding, Xcel developed two portfolios for bidding, based on two potential future capacity needs. Then, in August 2017, after extensive negotiation, Xcel and some 15 parties to the ERP entered into a “[stipulation](#)” that asked the PUC to let Xcel develop a third portfolio for bidding — the [Colorado Energy Plan Portfolio](#) (CEP), which is the subject of this post.

If the PUC approves the request (which it probably will), then Xcel will pursue the CEP, unless one of the other portfolios can shown to be materially less expensive (which it probably won’t). Long story short: Xcel is probably going to pursue the CEP, but it’s not yet a sure thing.



About Our Association



MOTTO

Greater Knowledge—Greater Service

PURPOSE

The Association of Desk and Derrick Clubs (ADDC), an international non-profit organization, is a premier provider of energy education and professional development. ADDC's purpose shall be to promote the education and professional development of individuals employed in or affiliated with the petroleum, energy and allied industries, and to educate the general public about these industries as well as the companies and global communities the members serve.

MISSION STATEMENT

Our mission is to enhance and foster a positive image to the global community by promoting the contribution of the petroleum, energy, and allied industries through education by using all resources available.

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