Volume 7, Issue 5

THE ASSOCIATION OF DESK AND DERRICK CLUBS

May 2019

April May events to remember

- May 1 May Day
- May 4 World Give Day
- May 8 V E Day
- May 12 Mother's Day
- May 18 Armed Forces Day
- May 22 Canadian Immigrants Day
- May 27 Memorial Day

COMING IN JUNE 2019:

Effective Communications Month

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ADDC

What Color is Your Jelly Bean?

At our April Birthday meeting, Angie Duplessis and Judi Adams presented a teambuilding and self-development program entitled, "What Color is Your Jelly Bean?" Each member at the meeting was given a box of mini jelly beans and was asked to select their favorite color, based on either color or flavor. Then, Angie presented some of the general personality traits that may fit based on the color chosen. So, what color do you think fits YOUR personality closest?

White or Black

• This individual is highly structured and organized; Surroundings are neat; If given an assignment wants to know how many pages, exact requirements; Always wants to know the rules; Memorizes things well; Can't stand sloppy, unorganized people; Deliberates before making decisions

• The white jelly bean person likes to be in control and likes a lot of praise. She tries to get her reports in weeks before the deadline.

• The black jelly bean person smiles a lot, is enthusiastic and always playful. In fact, she usually plays around at workshops, meetings, and conferences

Yellow

• Not usually outspoken; Always in a state of transition, whether they are 8 or 80; Usually smart and innovative, often artistic;



Sometimes confused in making decisions, unsure where they're supposed to be; Hard workers; Exciting to be with – will try anything as long as it's safe; Spiritual aspects usually important to them; They look at things with perspective and respect others' opinions.

 \cdot They are often not interested in following the rules, policies, and procedures.

ORANGE

• Cheerful and good-natured; Have the ability to get along well with almost anyone; They are friendly and have a ready smile; Usually have a quick wit; Fluent, often eloquent and profound in speech; Do not like to be left alone; Enjoy life and inspire others to reach their highest potential;

 \cdot They dress well and love luxury, such as gold jewelry.

RED AND PINK

• Are courageous and their energy seems boundless; Smile much of the time; If they

From the Editor,

So have you seen that the ADDC STORE has reopened? It boasts new items to boost. You can now get your shirts in any color! We are offering Hoodies, Multi-Tools and Color changing mugs. The store is now in contact with a new supplier, so you should receive your items most expeditiously. See page 27 of the Insight for ordering information.

Also if you noticed on page 9, the INSIGHT will be changing format, and we need writers, columnists, bloggers—and **YOU**. You can even write a "letter to the editor" and we'll post it. Please contact me for more information.

And did you see that the Convention Packets should be coming out soon? I have it on good authority that they should be out by the end of the month. As I have mentioned over the last few months, I have been trying to raise the courage to ask for company support. Well I did start to approach the subject. I mentioned that I planned to be more active next year, and that I might need more time to volunteer for the organization. So far that has been well received. I didn't specifically ask for support, but I am working on it. (I think somewhere in the back of my brain, I hope that when my bosses read this, that they will get the hint.— Heyyy Boss!?!?!)

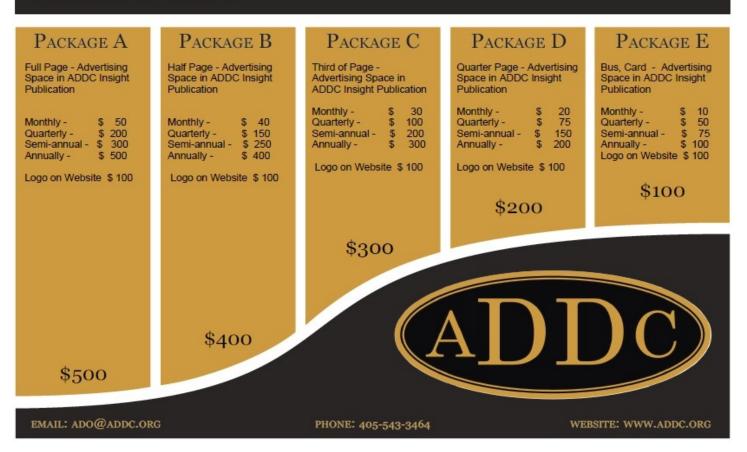
But seriously, whether or not I received corporate support I will still be a proud, dedicated member of Desk and Derrick. This organization has given me so much that I feel obligated to give back.

Until next month,

Maggi Franks

Association of Desk and Derrick Clubs

Advertising Packages



Terry Ligon

940-550-5168

2019 ADDC President HC 75, Box 495 Eliasville, TX 76481



May 2019

Board of Directors

<u>PRESIDENT</u> **Terry Ligon** L Chem Tech Company Inc

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CENTRAL REGION DIRECTOR Connie Bass New Tex Trucking

NORTHEAST REGION DIRECTOR **Donna Siburt**

SOUTHEAST REGION DIRECTOR **Evelyn McCurley-Ingram**

WEST REGION DIRECTOR Philana Thompson Merrion Oil & Gas terryligon@hotmail.com

All four of the region meetings are now over. What a great experience it is to reacquaint with old friends and make new ones. I hope you were able to attend at least one region meeting. Great educational opportunities were offered and I commend the host clubs on all of the hard work that was put into the planning and programs. The members, as well as the GAC's, to be commended for their hard work and dedication in putting these meetings together. Their advice, expertise and extraordinary efforts do not go unnoticed.

After attending a region meeting, I encourage you to take back to your clubs what you learned. Become a mentor for a new member, agree to serve on a committee, share new information with a member who was unable to attend—get involved and enthused! We need new members—they are the building blocks to make our Association stronger!

I would like to personally congratulate the newly elected Region Directors:

Shelly McCool – Enid Club – Central Region

Christina Forth - Edmonton Club - West Region

Shelly Hildebrant - Bay Area Club - Northeast Region

Susan Miller - Westbank Club - Southeast Region

Please join me in extending well wishes to each of them and offer your support and volunteer.

There are a couple of deadlines coming up. First of all, the deadline for the tax exempt form that each club must send in is May 15th. This is an important part of keeping our tax exempt status.

Secondly, the deadline for nominations to the 2020 Board of Directors is approaching. Have you thought about being an officer of the Association? Being an officer or ADDC has been and is one of the most rewarding experiences of my life. You have until June 7, 2019, to decide and submit your application.

Remember – "We are not held back by what we don't have, but by what we don't use." – Anonymous

Terry Ligon

(Continued from page 1)

see someone not smiling, will ask what the problem is; Genuinely care about people and become involved in others' problems; Highly influenced by others, share their sadness or grief; Make their decisions with feelings, act on impulses of the heart; Spend a great deal of time on the phone, usually listening to others; Sensitive, enthusiastic friends and lovers.

 \cdot Pink: often volunteer to do more, especially when an authority figure asks.

 \cdot Red Jelly Bean people are frequently frustrated.

VIOLET

• Flirty and passionate; Highly creative and highly excitable; Have new ideas and are visionaries; Short attention spans – can't stay put for long at a time; Disorganized, often choosing to close doors rather than deal with the organization; Procrastinators who thrive on chaos, enjoy the challenges of different problems; Have a problem dealing with highly structured time; Questioning – when given an assignment, asks why it must be done a certain way, want to do it differently

 \cdot Set high standards for themselves and those

who work for them.

GREEN:

• We always ask green to stand because they love recognition; these people are seen as leaders, usually in highly visible positions; They are respecters of authority and tradition; They are decisive, directed, and focused; They are peacemakers, who don't like conflict.

 \cdot They love black and white jelly be an people to organize their projects for them.

None of us is just "one color", but one color is usually dominant. All of us have some of the various traits associated

with other colors. This is important to realize when dealing with others. We should be able to empathize with those who see things differently and deal with problems differently than we do.

Submitted by Judi Adams - Westbank Desk and Derrick Club





Losing Patrick has been a very difficult experience. No words could ever express the appreciation I feel for the outpouring of love and support. It has been a great help!

Sending cards and flowers, saying prayers, offering to help, giving smiles and hugs, calling, texting--the list is endless.

Thank you for being there when I needed it most. I couldn't have made it through this time without all the special people in my life. I am deeply grateful.

Línda Rodgers, 2014 ADDC Presídent



Desk and Derrick Club of New Orleans June Anniversary / Industry Night

70th Year

You are cordially invited to attend Wednesday, June 12, 2019, 6:00 P.M.

Guest Speaker: Kemberlia K. Ducote CHIEF ADMINISTRATIVE OFFICER & SECRETARY LLOG Exploration, Co., L.L.C.



Copeland Tower Suites & Conference Center, 2601 Severn Avenue Metairie, LA 70002 Cost: \$26.00 Cash Bar <u>MENU</u> Broccoli and Cheese Soup Bronzed Redfish with Creamy Lemon-Butter Sauce Roasted Red Potatoes Chef's Vegetable Medley of Zucchini, Squash, Rainbow Carrots, and Cherry Tomato with Lemon Zest Strawberry Shortcake Rolls and Butter

Coffee, Iced Tea, and Water

Guests are welcome. Approval must be obtained from Membership Committee Chairman, Debi Baiamonte at 504-453-1009.

The Reservation form MUST be completed by all members and guests planning to attend the Anniversary/Industry Night Meeting on Wednesday, June 12, 2019.

Please mail form and \$26 check made payable to the Desk and Derrick Club of New Orleans to: Bev George Cowart, 404 Severn Avenue, Metairie, LA 70001-5145

For further information call: 504-338-6162 Reservations Only RESERVATION AND PAYMENT DEADLINE IS FRIDAY, JUNE 7, 2019.

Member Name

Guest Name

New York City eyes Quebec hydropower in bid to go green

BY STEVE COLLINSSUN JOURNAL posted April 24 Updated April 24

Mayor Bill DeBlasio calls for new transmission line down the Hudson Valley that would be nearly as large as one sought by Central Maine Power.

Massachusetts isn't the only place eyeing Quebec hydropower to transition from fossil fuels to produce electricity.

A plan put forward this week by New York City Mayor Bill DeBlasio says that reaching the target requires large-scale projects that include wind, solar and a new transmission line that would bring energy from northern Quebec to the Big Apple.

It's part of an overall plan to try to ensure that New York City gets half of its electricity from renewable sources by 2030.

Central Maine Power is seeking approval for a controversial \$1 billion transmission line that would bring Canadian hydropower to Lewiston for distribution into the New England electrical grid to supply Massachusetts with renewable energy in the years to come.

Some critics of the project have alleged it won't help deal with climate change by lowering carbon emissions and might undermine smaller-scale efforts in Maine to add more wind and solar to the mix.

But New York City's plan appears to have wide support from environmentalists who aren't expressing much doubt about the value of switching to hydropower.

Calling it a "key initial step," <u>the mayor's report</u> said the city will work with New York's state government to "pursue an investment in new transmission to access large-scale Canadian hydropower at a competitive price, resulting in a 100% carbon-free electricity supply for city government operations."

"Negotiations will begin right away," according to the report, "with the goal of striking a deal by the end of 2020 and powering city operations entirely with renewable sources of electricity within five years."

In response, Quebec Premier François Legault wrote on Twitter: Hydro-Québec could become the green battery of northeastern America."

Hydro-Québec said it's interested in cutting a deal to move forward with the long-delayed Champlain Hudson Power Express transmission line project that would deliver power along a new, buried line running through the Hudson Valley.

Hydro-Québec has supplied energy to New York state since 1910, but it became a sizable source after a 1978 line tied the province's electrical grid into one in the Empire State in the northern town of Marcy. Other connections have been added since. The power company says on its website that constructing a 1,000-megawatt line to serve New York City would add to its ability to deliver "clean energy" to New Yorkers.

The National Observer, a Canadian publication, said this week that Hydro-Québec has been adding new sources of energy for nearly two decades, "adding massive amounts of surplus capacity totaling over 5,000 megawatts, including the Romaine complex on the north shore of the St. Lawrence with four hydro dams."

That's enough to comply with all of the power needs sought by Massachusetts and New York City.

The company appears eager to work out a deal with DeBlasio.

"We are looking forward to sitting down with members of Mayor DeBlasio's team in the near future to negotiate contract terms," Hydro-Québec strategic communications adviser Lynn St. Laurent wrote in an email to the National Observer.

Hydro-Québec earned \$744 million in 2019 from exported power worth more than \$3 billion, according to its annual report.

It said the six New England states take about half of the exported power while New York already buys about a quarter of the company's exports. The rest of the energy is sold to neighboring provinces in Canada.

Legault has told legislators in Quebec that the province has the potential to become an "energy superpower" if it can reach deals to export its renewable electricity to the United States.

He also said the province would consider building more dams if necessary and that wind projects in Quebec are also a possibility "when there is need for them."

The most controversial part of DeBlasio's move to reduce carbon emissions is a plan to force many of the city's buildings to sharply reduce their carbon footprints starting in 2024, reducing overall emissions by 40% by 2030. That's because buildings represent more than two-thirds of New York City's greenhouse gas emissions, experts have found.

The proposed power line has attracted almost no attention outside Quebec.

COMING SOON – No later than June 1st!! INFORMATION PACKETS FOR ---



68th Annual ADDC Convention

September 25th – September 28^{th,} 2019 Kansas City, MO – Kansas City Marriott

SEMINARS

FIELD TRIPS

KC Gangster Tour Get Your Programs Here Small Club Ideas Using Social Media

Port of Kansas City and Steamboat Arabia Mid Missouri Energy and Farm Tour GM / Hallmark Museum / Union Station Tour University of Kansas and Distillery Tour Subtropolis and Kaufman Stadium Tour



Calgary

After 5 years, Medicine Hat powers down \$12M solar thermal power plant

Medicine Hat is shutting down its solar thermal power plant because it's far cheaper to use natural gas.

Low price of natural gas made solar power a too-pricey proposition

Stephen Hunt · CBC News · Posted: May 15, 2019 4:52 PM MT | Last Updated: May 15



These curved steel panels were part of a \$12-million solar thermal power plant in Medicine Hat, Alta., that opened in 2014. This week, the city announced it was shutting down the facility. (City of Medicine Hat)

A concentrated solar thermal (CST) plant seemed like a good idea at one time — circa 2009 — but this week, the city of Medicine Hat pointed its solar panels down, shuttering the facility after five years of operation.

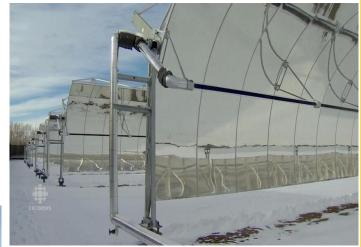
Collin Gallant, a reporter at the Medicine Hat News, said Wednesday in an interview with the *Calgary Eyeopener* that the plant wasn't a bad idea gone wrong, but rather a victim of persistently low natural gas prices.

"Back when this was thought up as an energy savings program, natural gas was about seven times more expensive than it is today," Gallant said.

The plant cost approximately \$12 million, with half of that coming from the City of Medicine Hat, and \$3 million from both the province and federal govern-

ment.

Back in 2014, when it opened, Medicine Hat Mayor Ted Clugston was bullish on solar thermal energy.



Medicine Hat now operates a solar thermal power plant. It's the first of its kind in Canada. 1:57

"The idea behind this project is helping to save gas — some day we will run out of it," Clugston said.

Even back then, Clugston acknowledged that the plant made no financial sense because it produced only one megawatt of electricity on an ideal summer day, and the city was not as flush with cash in 2014 when it opened as in 2009 when it launched the project.

Technology common in southern U.S.

The technology that the plant utilized is commonly used in the southern United States. According to Gallant, Medicine Hat's city council tapped into a federal innovation fund in 2008 with a pitch to locate a solar thermal power plant in one of Canada's sunniest cities (2,544 sunshine hours and 330 sunny days a year, according to the City of Medicine Hat website).

As the northernmost CST plant, Medicine Hat's facility provided Alberta Innovates with a significant sample size of data — the deal was that it would provide five years' worth — said Cal Lenz, Medicine Hat's commissioner of energy and utilities, in a release.

Medicine Hat solar thermal plant embraces green energy

"Medicine Hat took a bold step with the project, coming up with the idea at a time when gas prices were extremely high," said Lenz. "Innovation takes valiant moves, and this project is certainly an example While the project cost Medicine Hat more than the of the city's leadership as we continually explore energy solutions."

The city didn't announce any plans for the plant, other than to say that council would be presented with options in the fall.

Gallant said the plan might be to keep it shut down but intact, in case gas prices escalate, thus making CST-generated energy economical again.

Mothballs

"It's been built, it works, but the decision right now in Medicine Hat is just to mothball it until natural gas prices go up again," Gallant said.

The challenge is that natural gas prices have remained stubbornly low and there's no timetable that sees them rising to a level that would make operating the plant economically feasible in the near term, he added.

"I think they said that at the size it is now it would take gas costs of about \$19 or ... \$20 a gigajoule to to make it economical again," Gallant said.

Maintaining the plant without running it presents challenges, as well.

"There's some costs in keeping it clean," he said. "There are very large mirrors involved. There's maintenance — it is a pressure system and extreme pressure system so it has to be recertified every now and then.

Funding found for Alberta solarthermal project

"The idea is that they're going to mothball it, although I've heard tell they're looking for options for it – there's private industry that might need heat. [and] it does produce a lot of heat."

The project, Gallant added, is one of a number of sustainability-oriented projects initiated by Medicine Hat.

"The City of Medicine Hat has a fairly forward thinking about renewable energy. We've had a solar home subsidy grant here for about 10 years," he said, also noting wind purchase contracts, home turbines and other renewable projects.

"We're 'The Gas City,' but that allowed us to do some interesting things here."

original plan (which was targeted at \$9-10 million). and was already uneconomical by the time it opened in 2014, Lenz said it's no sustainability flop.

"Innovation may not always lead to commercialization, but it does provide valuable information for further endeavours. These learnings will help advance the next evolution of cost-effective, energy-saving Initiatives," said Lenz in a news release.

"The provincial and federal governments chose our city to lead the project and foster learning about this technology, and this objective has been successfully achieved.'



HELP WANTED!

The **INSIGHT** will be changing its layout in July of 2019. As part of this change, we are looking for writers, columnists, bloggers, and sales personnel to take on researching, collecting and writing articles for ADDC. Can you like to write new articles, a gossip column, or a society page? Can you take pictures?

Can you collect information about job openings? ADDC items for sale? Club events? We need individuals with these skills from each region.

This could be your chance to be an ACE reporter. If you feel that you have missed your calling and would like to help with the NEW & IMPROVED ADDC INSIGHT please contact:

Maggi Franks - mfranks@apprailcar.com Wendy Sparks - wsparks@cegx.net Alicia Young - ayoung.writer@gmail.com Evelvn McCurley Ingram feelinfroggy0713@gmail.com

Will you be the next Woodward or Bernstein?

2019 Central Region Meeting Seminar Demetrius J. Office

I have to admit that I had no idea what our seminar speaker would talk about at our very first Central Region meeting, even though I read the promo for it. Demetrius J. Office, our presenter, is a performance coach for Makarios Developments in Enid, OK. Because I support the field trips and seminars, I signed up anyway and decided to let him surprise me! Even now, I don't know if I can tell you what it was about (and I took notes)....but he was great! He was inspirational, motivational, funny, and drew us into his discussions.

He gave us life lessons and put it in terms of our personal lives and Desk and Derrick undertakings. He spoke about having a Social Contract, which is giving of your time, listening to others views, and leadership; and to ask ourselves: Who are we? Who were we? Where are we going? What worked then? What won't work now? How can we change for the better? How can we attract new members? How can we encourage members to participate? How can we make a committee work more efficiently? How can we make a fundraiser better? We bounced ideas off of each other and we were able to learn about each individual in the room and each club's

highs and lows.

He encouraged us to come out of our comfort zone and do things we've never done before. We need to add value to what we do. Are you dead or alive? Don't just be a member – be an active, productive member. We have a blank canvas and we each hold our own brush and our own stroke.

Mr. Office will also present a seminar at the 2019 ADDC Convention in Kansas City, MO. I highly recommend that you attend, because I was not able to do his presentation justice in this write-up!



Rena Shaffer of Wichita Falls

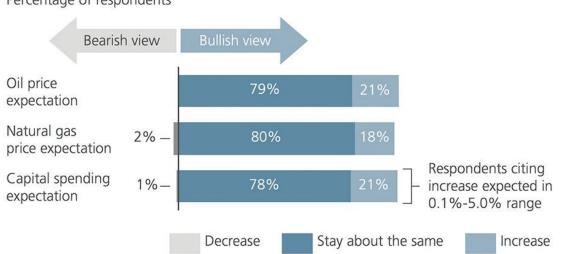


Oil and gas operators optimistic about second half of 2019 16 May 2019 Consulting.us

A recent study from advisory firm L.E.K. Consulting has found that oil and gas operators are optimistic about commodity prices, capital investment, and development cost. The 2019 Oil and Gas Study surveyed 200 North American exploration and production (E&P) companies in February 2019.

In 2018, oil prices started strong in the first half, leading analysts to call for \$100 per barrel prices by year end. However, markets ended up falling to an 18-month low of \$42 to end the year.

Heartened by price gains in the first quarter, most of the respondents in <u>L.E.K.</u>'s survey expect prices to stabilize at \$55-\$60 per barrel this year, with a portion expecting \$65-\$75. L.E.K. itself projects that 2019 oil and gas prices will run about flat or mostly higher than 2018's \$65 WTI (West Texas Intermediate) barrel and \$3.17 per MMBTU averages. Though not a cool \$100, respondents figure that the projected price levels are high enough at least maintain capital spend throughout the to year. Prices and capital spending



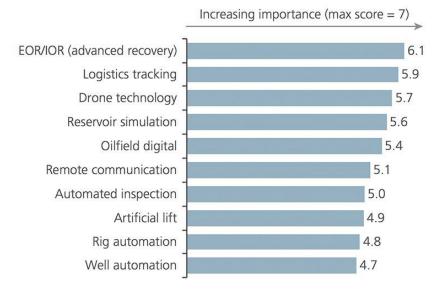
Percentage of respondents

"Even though positive market sentiment matches with recent first-quarter price gains, the question is whether 2019 can maintain a rally and avoid another tale of two halves," Nilesh Dayal, report coauthor and managing director at L.E.K. Consulting, said. "And operators think it can. In fact, they believe prices will be high enough to maintain capital spending throughout 2019 and possibly even drive growth relative to last year."

Though respondents are confident these price levels could grow capital spend over 2018, more than 50% said they would need three to four quarters of sustained pricing to adjust their budgets. This restraint and budget discipline is perhaps a response to the \$45 December. As such E&Ps want to see a longer stretch of stable prices than they've historically needed to (about 1-2 quarters) to spur on budget increases.

Approximately 80% of respondents said they expect stable costs in 2019, with the rest expecting modest increases of up to 5%. Transportation and logistics costs were selected as the most likely to increase, underscoring a skepticism towards pipeline capacity debottlenecking. Despite a 635,000 barrel per day boost in the *(Continued from page 11)* Permian from the PAA Sunrise, Bridge Tex Pipeline, and Enterprise Echo projects, respondents likely foresee longer-than-expected takeaway constraints.

Sand, water, pumping services, and drilling all scored low on expected percentage of cost change, however. Importance of new areas for tech improvement



Importance score based on respondent percentages

The survey found that respondents view well optimization solutions as the most critical technology solutions. Fracturing/stimulation, reservoir recovery optimization, and drilling categories scored highest in importance of current technology. In terms of new areas, however, enhanced oil recovery/improved oil recovery were tagged as the most important play for investment. EOR/IOR tech recovers oil following primary and secondary recovery, using methods like fluid expansion, gravitational drainage, and gas drive. L.E.K. found the high ranking of EOR/IOR somewhat unexpected, given its limited application in tight and shale reservoirs.

Digital solutions ranked highly as well, with logistics tracking, drone technology, and generic "oilfield digital" rated as important.

Looking forward, the L.E.K. report recommends that E&P oil and gas firms maintain budget flexibility, shaping a balanced asset strategy while pulling operational cost levers <u>like digital solutions</u>. Consolidation is one avenue to achieve the above goals.

Oil and gas deals – excluding Chevron's acquisition of Anadarko Petroleum – have fallen to a 10-year low, however. Mergers were down 93% in Q1 2019 over the same period last year, suppressed by global uncertainty – including a slowing Chinese economy, unclear US fiscal policy, and energy transition initiatives.

"In the coming year, E&P operators should investigate ways to maintain budget flexibility, identify meaningful operational cost levers, like digital solutions, and form a sustainable and balanced asset strategy," Dayal concluded. "Consolidation can accomplish these goals and really should remain a strategic consideration for larger E&Ps."

Linda Rodgers Nominating Committee Chair

155 Coy Avenue Farmington, NM 87401

(505) 320-5237 cell (505) 324-3981 office Email: lindar@pescoinc.biz

February 11, 2019

To: All Club Presidents

From: 2019 ADDC Nominating Committee

Re: Nominations for 2020 ADDC Officers

The 2020 Officers of the Association of Desk and Derrick Clubs will be elected at the 2019 ADDC Convention to be held in Kansas City, Missouri. The ADDC Nominating Committee is currently accepting nominations for the following 2020 ADDC Officers:

President-Elect Secretary Treasurer

The deadline for all nominations to be received by the Nominating Committee Chairman is **June 7**, **2019**. Any nominations received after that date will not be considered by the Nominating Committee.

Requirements and procedures for submitting nominations and the duties of the Officers are described in the Association Bylaws and can be found on the ADDC website in the Guidelines section. All candidates for nomination to ADDC offices shall:

- 1. Have served or be serving as Regional Director
- 2. Nominees for Association President-Elect must have served or be serving on the Association Board
- 3. Nominees shall possess knowledge of Desk and Derrick history and aims, and dedication to the Association's purpose
- 4. Nominees shall have sufficient time available for assigned responsibilities 5. Be bondable.

The ADDC Officer Nomination Forms are available in the Forms section of the Members Only pages of the ADDC website (addc.org).

Please send all nominations by the **June 7**, **2019** deadline, including NOMN1, NOMN2, and NOMN2A forms, along with a photo of candidate to Linda Rodgers, Nominating Committee

Chairman, via mail at the address above or via e-mail at lindar@pescoinc.biz.

Línda Rodgers



Board of Directors

PRESIDENT Terry Ligon L Chem Tech Company Inc

PRESIDENT ELECT **Keith Atkins** Murphy USA, Inc.

SECRETARY Wendy Sparks Carl E Gungoll Exploration Inc

TREASURER Evelyn Green GBC Minerals, Ltd.

IMMEDIATE PAST PRESIDENT Christina Forth FFAF Cargo

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SOUTHEAST REGION DIRECTOR **Evelyn McCurley-Ingram**

WEST REGION DIRECTOR Philana Thompson Merrion Oil & Gas

CENTRAL REGION MEETING – FIELD TRIP

OKLAHOMA HISTORY CENTER OKLAHOMA CITY, OKLAHOMA

At the Central Region Meeting there were two different field trips offered on Friday and the one that I attended was to the Oklahoma History Center in downtown Oklahoma City. Local members that attended with me were Rena Shaffer, Joan Cartwright, Geneva Wood, Pat Hensley, Shirley Bridwell and Nelva White. We boarded a van and headed over to the 215,000 square foot History Center, which is located on eighteen acres, for our orientation of their five galleries.



The gallery that we spent the most time

at was the Kerr-McGee Gallery which focuses on the Oil and Gas History in Oklahoma from World War II to present times. This exhibit tells of the legacy of our industry; including the jobs, the tax revenues, patronage and even some landmarks. This timeline includes technology advances, countless innovations and people



willing to take risks for an industry that is loved and treasured.

One thing that interested me besides watching our club president Rena try to drill a well at one of the hands-on exhibits, was the Golden Driller. This big guy in the museum is only a replica of the one that was used at a trade show in 1953 at the Tulsa State Fairgrounds. He has weathered a few years (and a few bullet holes too!) there including being left behind by the original builder (an oilfield supply company

out of Texas) and referrals that he needed a shirt! The Golden Driller is 76 feet tall and the tallest free-standing statue in the United States, he weighs 22 tons and built so strong to survive 200 mph tornado winds. There is a plaque at the base of him and his derrick that dedicates him "to the men of the petroleum industry who by their vision and daring have created from God's abundance a better life for mankind." The Driller's last update was in 2011 with a fresh coat of paint that suppliers say will last 100







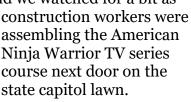
years. Thank you, Tulsa for adopting him and Oklahoma for declaring him your official state monument!!

We enjoyed lunch at the museum's restaurant called Winnie Mae's which offered great sandwiches and wraps! We glanced through a couple more exhibits and took a couple of pictures of our President Rena and Joan in the chuckwagon, saw a pink kitchen and checked out the Native American exhibit.

Oh yes and we watched for a bit as



of the oil and gas industry. Much of the equipment was donated to the Oklahoma Historical Society in the mid-1960s. I wished we would have had just another hour to view this outdoor area. The Park tells of the dangers, inventions, money gained and lost, successes, and challenges. You would be amazed at the park and had it not been cold and windy that day, we would have done more than just taken our group's picture there that day. Brrr! It was a great trip; wish you could have been there with us! **Submitted by Diana Walker of Wichita Falls Desk and Derrick**



The Devon Energy Oil and Gas Exhibition Park that is located on the grounds of the History Center tells of the drilling, production and transportation phases







The World's Last Coal Plant Will Soon Be Built

More generators were closed last year than approved, for possibly the first time since the 19th century.

By <u>David Fickling</u> May 14, 2019, 10:01 PM EDT



A tipping point for this fossil fuel? Photographer: Carla Gottgens/Bloomberg

David Fickling is a Bloomberg Opinion columnist covering commodities, as well as industrial and consumer companies. He has been a reporter for Bloomberg News, Dow Jones, the Wall Street Journal, the Financial Times and the Guardian.

Fossil-fuel advocates have a favorite rejoinder to those who predict a global shift to renewable energy: Coal has never been more popular.

It's a decent argument because it happens to be true. While coal-fired power has declined by nearly a quarter in Europe and almost 40 percent in North America over the past decade, the change has been overwhelmed by a 63 percent increase in Asia.

Burning Up

Coal-fired generation is in decline everywhere -- except in Asia, where it's been booming

That makes ambitions to prevent more than 1.5 degrees Celsius of global warming seem all but out of reach. Making matters worse, there's a further 236 gigawatts of plants under construction worldwide, according to the <u>Global Coal</u> <u>Plant Tracker</u>, an online database operated by climate activist groups. Put together, that's enough to add another quarter to the current fleet of turbines.

The tide may finally be turning, though. Final investment decisions, or FIDs, for coal plants have fallen by about three-quarters over the past three years, from about 88GW over the course of 2015 to around 22GW in 2018, according to the International Energy Agency's latest <u>world invest-ment report</u> released this week.

The full significance of that figure isn't apparent until you compare it to the pace at which plants are shutting down. Some 30GW of generators were retired last year, so more capacity was closed in 2018 than was approved – almost certainly the first time this has happened in a generation, and possibly the first time since the 19th century. When FIDs drop to zero, the <u>140-year era of coal plant construction</u> will finally be over. <u>1</u>

Help the Aged

Annual final investment decisions for coal generation projects have fallen below the pace of closures

Source: Global Coal Plant Tracker; International Energy Agency; Bloomberg Opinion estimates

It will take a few years for that to work its way through the system, since plants typically take about four years to build after reaching FID. Still, the peak in global plant capacity could be just months away.

"This is a sneak preview of where we'll be in three to four years time," said Tim Buckley, director of energy finance studies at the Institute for Energy Economics and Financial Analysis, a research group that favors energy transition. "If closures stay where they are, we're at peak by 2021."

Of course, there's still 236GW of projects under construction – but announced retirement plans already offset almost all of that:

Giving With One Hand, Taking With the Other

Announced coal retirement plans in the U.S., Europe and India alone are enough to offset all plants currently under construction

Source: Global Coal Plant Tracker; Energy Information Administration; Beyond Coal; India Central Electricity Authority, Bloomberg Opinion estimates

Note: Retirement plans are: Europe, 100GW; U.S., 86 GW; India, 48GW.

Even China – which accounts for more than half of the construction pipeline, with 129GW underway – is slowing down. It shutters between 5GW and 10GW of coal every year, and added just 4GW of net capacity last year, according to BloombergNEF.

Peak coal capacity doesn't definitively mean peak demand. Plant utilization is at low levels in most of the world's major coal markets because over-investment and inroads being made by renewables and gas are forcing generators to switch off furnaces for longer and longer stretches. The U.K., for instance, just <u>went without coal-fired</u> <u>electricity</u> for a week. In countries like India and China where over-investment is the main problem and electricity consumption is still increasing, it's just possible that overall coal-fired generation could rise as energy demand climbs to align with the supply that's already built.

Still, that's not the way that financial decisions are pointing. The top line of the IEA report is that energy investment in general is falling short – renewables spending, for instance, needs to double by 2025 to get the world on track below 2 degrees of warming. But the deeper story is of an energy industry whose bean counters seem to be betting on a sharp decline in fossil fuel use, even as policymakers track a less ambitious path.

Annual FIDs for coal-fired power are already below where the IEA expects them to be seven years from now under its New Policies Scenario, which envisages countries making somewhat more ambitious emissions cuts than are currently in place. That suggests spending is likely to wind up closer to its Sustainable Development Scenario or SDS, an alternative model that would target global temperature increases below 2 degrees. <u>2</u>

Follow the Money

Oil and gas companies are signing off on new project developments as if they think the IEA's most radical major decarbonization scenario is their central case

Source: IEA, Bloomberg estimates

Note: Figures are visual estimates from IEA charts; the IEA didn't provide raw data before publication time. The SDS lines represent annual average rates for the 2018-2025 period estimated by the IEA to hit its Sustainable Development Scenario. Boe=barrels of oil equivalent.





Indeed, to judge by the slow pace of recent investments in gas-fired power and new oil and gas production, it looks like energy companies are treating the SDS as their central case. That would be an extraordinary outcome, suggesting that a mere continuation of current trends in fossil-fuel investment would be enough to hit the IEA's most ambitious major climate target.

It's always possible that a fresh investment boom is waiting in the wings to reverse that pattern. The resources industry is notoriously cyclical, and has spent years returning cash to shareholders to atone for the mountains of capital wasted during its last splurge. Still, at some point you have to ask if the low rate of current investment is a temporary cyclical low, or the harbinger of structural decline.

The end of coal – and oil, and gas – isn't quite here yet. But the energy industry appears to be betting that it's coming soon.

It's possible that some new plants could be signed off even beyond then to replace further retirements and in niche cases. Without a new investment boom, though, it will no longer be an important technology to supply new grid demand.

For a better handle on the issues with these scenarios and how they're used, <u>read this piece</u> by my colleague Liam Denning.

This column does not necessarily reflect the opinion of

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How to make Houston the sustainable energy capital of the world

By Charles McConnell Updated 6:58 am CDT, Thursday, May 16, 2019

Photo: PAUL ELLIS, Contributor / AFP/Getty Images

Houston can lead the effort to meet the world's energy need while reducing greenhouse gases, the author argues.



The global demand for a low-carbon future is undeniable. Scientific research, opinion pieces, political speechmaking and the global marketplace are all speaking loudly. The question is how? At what pace? At what cost?

And despite all the talk, the real leadership will be shown through actions to reduce greenhouse gas emissions while also meeting the growing global demand for energy.

Texas contributes significantly to the energy mix and products demanded by modern life. Globally the economic uplifting of entire countries and the continued growth of population and prosperity means that demand for energy and material goods will continue to grow, and we must ensure that these products remain affordable and become more

environmentally friendly. The solution will largely fall to the energy industries in the states and countries that produce energy to embrace this future as an opportunity.

That means Houston, and Texas, will be critical to success. And we have the good fortune to have forward-thinking, global energy companies that recognize this coming change. Virtually all of them have a strong presence in Houston.

Texans know renewables are important, today and for the future, as the state produces more wind-generated electricity than all but six countries. The amount of solar is growing rapidly. We must strategically integrate all sources of renewables and promote electrification via clean sources of energy. This is not simply good for the environment - it will offer benefits to consumers and create value for the industries.

Texas also consumes twice as much oil, gas and coal as any other state, by virtue of our large manufacturing base, so it falls to us to create this transformation to a low-carbon future.

This transformation will require more than the efficient and lower carbon production and generation of energy. For example, Texas has led the country in the integration of industry with infrastructure and demonstrated how to reduce and capture CO2 emissions in a way that is both cost-effective and



useful, storing carbon dioxide in geologic formations and using it for enhanced oil recovery.

Carbon Capture Utilization and Storage (CCUS) has



been practiced for over 50 years in Texas, used both in the Permian and East Texas for enhanced oil recovery with great success. There are challenges and opportunities for methane, as well. The primary component of natural gas, methane is also a valuable fuel and feedstock for petrochemicals.

We must invest in transformative technologies that will allow us to view carbon and methane as not simply a waste to be disposed of, but an opportunity to lead the nation in both eliminating emissions and creating value.

That won't happen on its own. It will require new policies promoting investment and restructuring of the marketplace. We must all work to create a new energy ecosystem, not just new technologies to capture emissions, but to also produce lower-carbon fuels and products that can be differentiated and compete globally. It is not about choosing the "right" technology or product, but about incorporating all forms of fuels and technologies for both renewable and hydrocarbon-based energy while also lowering emissions. Texas must embrace this immense opportunity to leverage our universities, energy companies and marketplace to take advantage of our world-leading energy infrastructure. If we get it right, we can become a playbook for the rest of the world. We can walk the talk here and accelerate the transformation that will benefit everyone.

There is no more important global challenge, no more important time and no more important place than Houston. Real sustainability requires meeting the growing global demand for energy and reducing greenhouse gas emissions significantly, as well as assuring energy is affordable and reliable for all. Houston and Texas must become the Sustainable Energy Capital of the World.

Charles McConnell, a longtime energy executive and former U.S. Assistant Secretary of Energy, is executive director of the Center for Carbon Management in Energy at the University of Houston.

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BRAVING - Rumbling with Trust

On Saturday March 9th, Ramona Bienvenu and Carol Trosclair put on a great seminar regarding Trust. I must admit when I heard it was going to be on Trust, I wasn't sure what they were going to tell me about Trust that I already didn't know... boy o boy – was I wrong!

First of all, I was so very pleased to see that there were 29 attendees for the seminar. The Enlink conference room on a Saturday morning was packed! Secondly, the seminar taught me that it's not just as simple as, "do you trust a person or not", but that there are probably specific reasons behind why you may or may not trust them. The reason(s) can usually be broken down by using the acronym **BRAVING**.

Boundaries

You respect my boundaries. We are clear about what's ok and not ok. Your willing to say no.

Reliability

You do what you say you will do, when you said you would.

Accountability

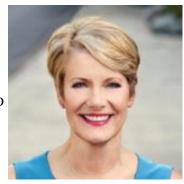
You own your mistakes, apologize and make amends.

<u>Vault</u>

You don't share information or experiences that are not yours to share.

Integrity

You choose courage over comfort.



MS. Frances McIntosh

<u>Nonjudgement</u>

You allow people to talk to you about how you feel without judgement.

Generosity

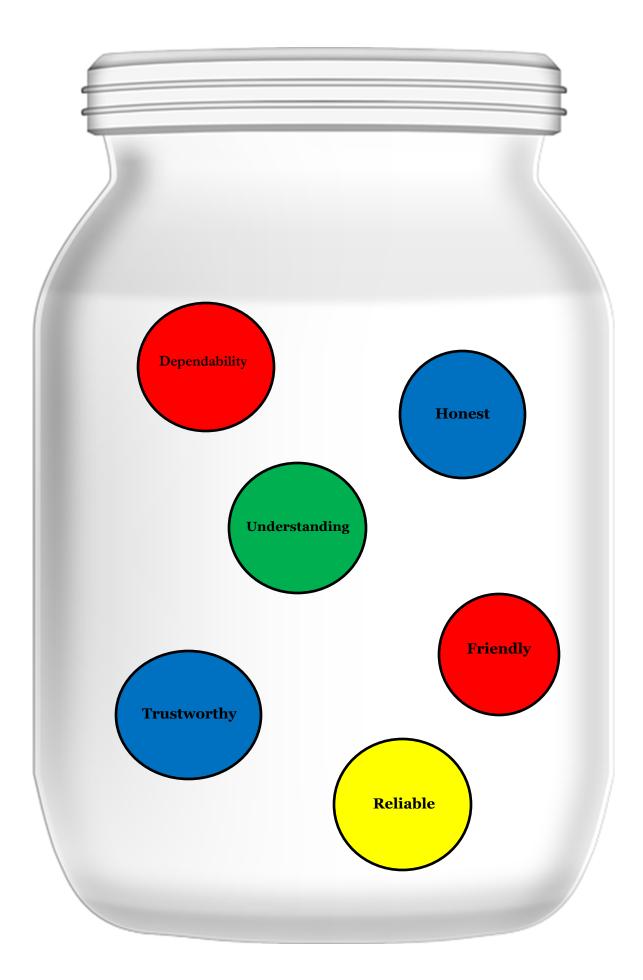
You extend the most generous interpretation possible to the intentions, words and actions of others.

Choose a person with whom you are experiencing trust struggles with. It would be a good practice to use **BRAVING** so you can get clear on why the struggles exist.

The presenter, Ms. Frances McIntosh based this seminar on the book "The Daring Way" based on the research of Brené Brown. Frances specializes in Leadership and Organizational Development and is a Certified Facilitator for the Daring Way. She was very well spoken and gave multiple reallife examples. Frances allowed attendees to ask questions throughout her seminar, which created an environment for very open and honest dialogue.

Frances had the group think about what exact personality attributes are important to each of us. She had us "fill our marble jar" with them. It was interesting to have time to sit and think about something so personal and then reflect on the findings with the group. I have some of my "marbles" on the next page.

Every last one of the 29 attendees were very engaged and asked great questions. Even as I am writing this, I am still so grateful to have had the opportunity to attend this eye-opening seminar. It was really one of the best seminars that I attended. **Submitted by Sheri Bienvenue**



New Mexico Governor Michelle Lujan Grisham vows to collaborate with oil and gas during boom

Adrian C Hedden, Carlsbad Current-Argus

Published 1:49 p.m. MT May 20, 2019



(Photo: Kyle Marksteiner)

Five months into her tenure as governor of New Mexico, Michelle Lujan Grisham vowed to continue to work with the oil and gas industry even as her administration rolled out and agenda to prioritize renewable energy amid a boom in oil and gas development in the southeast corner of the state.

She was joined by New Mexico Environment Department Cabinet Secretary James Kenney and Sarah Cottrell Propst, cabinet secretary of the Energy, Minerals and Natural Resources Department during a Friday visit to Carlsbad.

During the visit to the Cavern City, all three officials explained their priorities in working with oil and gas, while also diversifying New Mexico's energy economy.

Lujan Grisham pointed to the Energy Transition Act, a law she signed during the recent legislative session that ran from January to March as evidence that her administration is committed to working with energy counties such as Eddy and Lea in the southeast and San Juan County in the

northwest.

The Act called for New Mexico to completely convert to carbon-free electricity by 2045, but Lujan Grisham said PNM, the company that runs the San Juan Generating Station – a coal power plant near Farmington – could convert by 2040.

"The reason they can get it done, is because the entire country and the state has incredible investments in wind and solar. It's happening," she said. "Now we're creating an ecosystem when we say we want every single productive



job. But they're energy jobs. Who knows more about energy jobs? The energy counties in the state of New Mexico."

(Photo: Office of New Mexico Governor Michelle Lujan Grisham.)

Lujan Grisham countered arguments that her administration favored renewable energy over fossil fuels by pointing to a recent announcement that oil giant Exxon Mobil and Permian subsidiary XTO Energy plan to bring more than \$64 billion in investments to New Mexico in the next 40 years.

She said long-term investments from the industry shows that oil and gas is confident Lujan Grisham is supportive of their continued presence in New Mexico among the emerging wind and solar industries.

"The question I sometimes get is are you picking one set of energy investments over another? Absolutely not," Lujan Grisham said. "This should be an energy economy. I think we can be a clean energy state. We're going to do incredible work in the environment. But we're going to be an all-of-

the-above energy economy.

"If we weren't, and we were trying to do things that didn't embrace that opportunity and potential, then I wouldn't have been with XTO and Exxon this morning talking about their long-term investment that they've announced," she said on Friday. "We're doing that as a partnership."

Other oil and gas companies commended Lujan Grisham's administration for working with them in creating beneficial regulations during and after the legislative session.

Lloyd Helms, chief operating officer of EOG Resources, a Houston-based oil and gas company said the administration successfully collaborated with oil and gas and encouraged companies to make long-term investments in New Mexico

"New Mexico is a core asset for our company, and we are committed to the state in the long-term," Helms wrote in a May 16 letter to Lujan Grisham. "EOG is very encouraged by the approach taken during the first few months of your administration. We commend your leadership in creating a culture of collaboration for all stakeholders, including the oil and gas industry, in policy and regulatory discussions.

"This approach will allow all citizens of New Mexico to benefit from oil and natural gas production while also focusing on environmental stewardship."

Todd Abbott, vice president at Marathon Oil said the governor's policy decisions prove a commitment to continued oil and gas production in the Permian Basin.

He pointed to the signing of the Produced Water Act during the session, commending the law for providing regulatory certainty for waste water created during hydraulic fracturing.

"The policies pursued by the administration in 2019 demonstrate that the Governor's Office seeks to promote both development and sustainability within the Permian Basin," he wrote in a letter to Lujan Grisham.

"This important law (Produced Water Act) addresses a

number of key issues for industry related to the handling, recycling, treatment and use of produced water, which are necessary to promote expanded development operations within the state."

Continued regulatory certainty and proactive measures were also contained in an executive order issued by Lujan Grisham in January, Kenney said, to establish standards for reducing industrial methane emissions.

The order also established New Mexico's Climate Change Task Force – comprising of Kenney and Cottrell Propst – tasked with investigating impacts on climate change from industries regulated by the State.

This allows State regulators to better collaborate with industry to curb the effects of greenhouse gasses, Kenney said.

He said if air quality gets bad enough, vehicle inspection could be instituted in Eddy and Lea counties.

That would mark a regulatory failure, Kenney said.

"Ozone has been growing in New Mexico. That triggers federal requirements that we have to meet- ozone standards," he said. "We don't have to wait for it to get that bad to start doing something about it. The (executive order) on climate goes to that point. It puts us in a stakeholder consultation role sooner than waiting for the air quality to get so bad."

Cottrell Propst said the sentiment from industry is that it also hopes to better collaborate with the State, using technological advancements alongside evolving regulations to sustain oil and gas's major role in New Mexico's economy.

She touted EMNRD's ability to continue to get applications to permit drilling (APDs) approved in 10 days or less, amid a dramatic influx in production.

"Part of why they are booming in the Permian is because of the technology advancements that are allowing them to take advantage of that resource in a way that older technology did not," Cottrell Propst said. "We, as the regulators, have to keep up with that. The industry understands that.

Dual Function Power Generator Can Make Electricity From Seawater

REMOTELY OPERATED VEHICLES, DIVING ROBOTS AND SUBS WOULD ALL BENEFIT FROM THE NEW POWER GENERATOR, ALLOWING THEM TO BE INDEPENDENT OF THEIR BASE FOR LONGER. S.BACHSTROEM/SHUTTERSTOCK

By Stephen Luntz 15 MAY 2019, 12:08



Devices needing to operate remotely for long periods underwater, like subs and diving robots, are currently limited by their batteries. That could change with the announcement of a device that can produce electricity from seawater in two ways, one offering slow sustained power, the other can be used for short bursts where the need is higher, and can autonomously switch between the two when needed.

Humans rely on aerobic production of energy for light to medium exercise, using oxygen from the air to burn carbohydrates. For short sprints or power-lifting, our bodies turn to fast twitch muscles that metabolize anaerobically. Similarly, marine organisms run for long periods on the energy produced by reacting molecules with oxygen dissolved in water, but turn to different energy modes when more power is needed briefly.

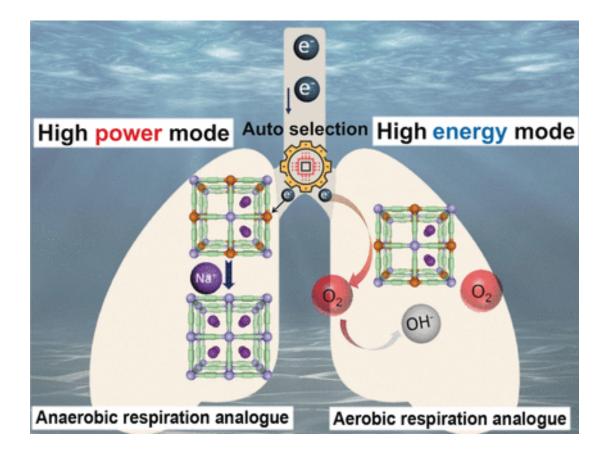
<u>Professor Ming Hu</u> of East China Normal University thought this might provide a model for remotecontrolled submersibles or diving robots that spend much of their time slowly cruising on low power, but occasionally need to repair pipelines or collect samples.

The system can switch autonomously between two modes of operation, able to handle short spikes of power and long term steady power. Wiley-VCH

In the journal <u>Angewandte Chemie</u>, Hu describes a power source matching those needs using <u>metal-</u> <u>organic frameworks (MOFs)</u>, a class of polymers useful for storing and purifying gasses, as a cathode. In this case, the MOF is made up of cyanide ions linking together iron ions.

Most of the time the electrons flow from a metal anode to the cathode, to be transferred to dissolved oxygen, converting it to O²⁻. Unless the submersible strays into an <u>oceanic dead zone</u>, where an environmental disaster has removed all the oxygen, it can operate like this indefinitely – after all fish have been powering themselves from dissolved oxygen for millions of years and more keeps getting stirred in.

However, even in well-mixed waters the amount of oxygen is too low to allow this approach to release large amounts of electricity quickly. To up the current something different is required. Hu's device responds to increases in power demand by sending electrons to the iron ions, changing their status from Fe³⁺ to Fe²⁺. This temporarily gives the MOF a net negative charge, attracting sodium Na⁺ ions from seawater, which restore the balance. The concentration of sodium in seawater is much higher than dissolved oxygen so electricity can be released quickly, without waiting for more water to flow past.



Since the MOF contains a finite number of iron ions, it can't run like this for long. However, the system is self-regenerating – once the need for extra power passes oxygen in fresh seawater returns the iron ions to Fe^{3+} , removing the attraction to positive charges so the sodium gets washed out.

The energy produced is insufficient to make this approach a large scale source of clean energy, but a demonstration model was able to run 39 LEDs and a propeller for short periods, while resisting corrosion, which is a start.





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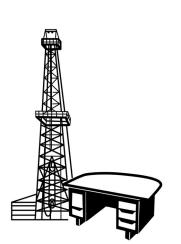
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