

Message

From: Maisano, Frank [frank.maisano@bracewell.com]
Sent: 4/30/2018 7:14:14 PM
To: Maisano, Frank [frank.maisano@bracewell.com]
Subject: Apr 30 PRG Energy Update: KY Derby Preview, Recess Energy Week

Friends,

Well, it seemed Scott Pruitt was getting a rough ride last Thursday on Capitol Hill but the White House Correspondents Dinner speaker Michelle Wolf may have underperformed him Saturday. Apparently, many didn't particularly like a number of her jokes and her coverage was worse than NRDC's coverage of Pruitt. I am sad I missed it this year, but we were celebrating my colleague Scott Segal's birthday. Also, Hannah was home from Wellesley for the weekend to umpire a US national team field hockey match on Sunday.

Okay folks, the first week of May means it's Kentucky Derby week. The action starts Wednesday when post positions are drawn. Kentucky Oaks on Friday and post time for the big race is 6:46 pm on Saturday. We have the field and betting breakdown in a special section below. I am telling you that *Justify*, *Mendelssohn* and *Good Magic* are who I'm watching, but see below for the full details and predictions.

ICYMI, the FAA reauthorization passed Friday in the House and included provisions to update the Stafford Act (how we pay for disaster relief) that speeds up inspections and ensures a percentage of assistance is dedicated to predisaster hazard mitigation. Given the approaching NOAA hurricane season forecast, as well as the current Congressional discussions of improving disaster relief, perhaps this is the right time to dig into this hurricane preparedness issue and focus on some of the solutions the most thoughtful planners are looking at today. Researchers at MIT are already tackling part of the extreme weather calculus by looking at how to better fortify our structures to withstand the destructive effects of extreme weather events. Jeremy Gregory, executive director of MIT's Concrete Sustainability Hub (CSHub), is pushing the frontier of academic research into building materials, with implications for policymakers, building designers, communities and the vulnerable residents of hazard-prone areas. We can help you here if you are digging in. Business Council for Sustainable Energy (BCSE) President Lisa Jacobson said the legislation "will ensure that the United States better prepares for disasters and extreme weather events and rebuilds more resiliently for when disaster does strike."

Secondly, a number of folks reported on Friday that the Administration plans to freeze fuel economy standards at model year 2020 levels through at least model year 2026 vehicles. While some are looking at it as a rollback, I would remind you that the Phase II targets were always seen as an overreach by most unbiased experts. In fact, the agreement with a mid-term review was specifically designed to right-size the regs if it was likely that they would be unattainable (oh and they seem to be). Either way, our friends at SAFE, Robbie Diamond, Greg Rogers, et al are in the middle of the action and can comment. In fact, Diamond told the LA Times "a long, litigious road is the worst outcome for all stakeholders, especially the auto industry and American consumers."

We taking a deep breathe this week with Congress in recess and more Pruitt hearings set for next week.

Off the Hill, this week is Waterpower Week in DC with the Hydro Association holding several events. In Houston, the Offshore Technology Conference rolls into action. Abby Hopper headlines Solar Summit 2018 tomorrow and Wednesday in San Diego and finally, the Columbia Center for Global Energy hosts an event today on conservative prescriptions on climate change that includes former Bush CEA chair Glenn Hubbard and our friend Rich Powell of ClearPath.

Finally, today is a big day in the trade world as temporary country exemptions on steel/aluminum tariffs expire. My colleagues Josh Zive, Stoney Burke and Paul Nathanson are all over it and happy to discuss on the record. As well, you can find more trade/tariff issues at the Coalition of American Metals Manufacturers and Users, which you can follow on Twitter at @tariff saretaxes or on the website is www.tariff saretaxes.org.

Call with questions. Best,

Frank Maisano

Ex. 6

c. Ex. 6

FRANKLY SPOKEN

“As the largest refiner by capacity in the U.S., with a best-in-class operating capability and a strong capital structure, the combined company will be exceptionally well-positioned to deliver on its synergy and earnings targets.”

Andeavor chairman and CEO, Gregg Goff discussing today’s deal with Marathon and how it provides value to shareholders now and in the future as part of the combined company.

ON THE POD

Bracewell Podcast Talking Trade – The latest Bracewell podcast will be posted soon and will focus on trade. It will soon be live on [Stitcher](#), [iTunes](#), [SoundCloud](#), and [Google Play Music](#) where Paul and Josh discuss today’s tariff deadline.

Amy Harder Talking Pruitt On *TrumpWatch* – With the Pruitt hearings last week, Amy Harder of Axios, New York’s WBA podcast “[TrumpWatch](#)” to discuss whether Pruitt stays in his role at the EPA and discusses his agenda. , Amy discusses the testimony with host Jesse Lent about some of the more consequential actions he has taken while overseeing the EPA.

FUN OPINIONS

Harder Line on Climate – Our Friend Amy Harder has an Interesting column in her regular [Harder Line](#) column on [Axios.com](#) that discusses why climate change can’t escape Washington’s back burner. Amy smartly says climate change is one of the biggest issues facing political and corporate leaders, yet it is almost always put behind more imminent priorities. The amorphous, long-term nature of the problem doesn’t fit well into political agendas, and companies respond in kind.” Even some of my friends in the environmental community with quietly admit this. And it is also why Tom Steyer is now spending his millions on [impeachment ads](#) rather than the environment and climate.

THE DERBY PREVIEW

The annual Run for the Roses is back again for another edition of one of horse racing's biggest events. The first Triple Crown race of the year, the [Kentucky Derby](#) features a field of 20 horses vying for a purse of \$2 million. Here's a quick look at the basic information you need to know ahead of time so you don't miss out on any of the festivities:

The **144th Kentucky Derby** is the most exciting two minutes in sports. It looks like we are in for a great and competitive race on Saturday. There are a few exciting prospects, and a few budding stars that will be going to post, but we also have some pretenders to sort through. The crop this year looks potentially strong, but important to note, while he qualified, [Gronk](#) is out because of a sickness.

Post time — 6:46 p.m.

Purse — \$2 million, with \$1.4 to the winner.

Attendance — More than 170,000

Weather — Mostly sunny and nice, 12% chance of precipitation, high of 81°. The forecast is probably the single most important factor behind a good Kentucky Derby. It affects everything from track conditions, where wet weather can lead to a sloppy afternoon, to the infield, where wet weather can lead to a completely different kind of sloppy afternoon. Bookmark willitrainon Derby Day now and be sure to check back as we get closer to Derby Day.

TV — NBC's coverage features hosts **Bob Costas**, a 27-time Emmy Award-winner, and **Mike Tirico**; analysts **Randy Moss** and **Jerry Bailey**, the Hall of Fame jockey and two-time Kentucky Derby winner; NBCSN host **Krista Voda**; analysts/handicappers **Bob Neumeier** and **Eddie Olczyk**; reporters **Donna Brothers**, **Carolyn Manno**, **Laffit Pincay, III**, and **Kenny Rice**; and race caller **Larry Collmus**.

The Distance — The Derby is 1 ¼ miles, or 10 furlongs. Secretariat's 1973 time of 1:59.40 remains the fastest ever.

The Draw — Post positions will be drawn Wednesday morning at 11:00 a.m.

Draw Facts — Since racing began using a starting gate in 1930, the #5 post has the highest win percent at 11.4%. Interestingly, the #10 spot that has the highest in-the-money percentage of runners at 29.6%. Conventional wisdom has it that the inside post positions are not as good for horses these days due to the size of the field and the risk of being squeezed out as the race progresses. Post positions 1, 2 and 3 have been in a drought without a winner since 1986, 1978 and 1998 respectively. The official Kentucky Derby website has a convenient list of complete [post position records](#) for every Kentucky Derby over the years.

Churchill Downs — Known as the home of the Kentucky Derby and the Kentucky Oaks, Churchill Downs Racetrack is in Louisville, Kentucky and occupies 147 acres, featuring a one-mile dirt, oval racetrack and a seven furlong turf race course. Thoroughbred racing, the Kentucky Derby, and the Kentucky Oaks have run continuously at Churchill Downs since 1875. It features the Twin Spires — built in 1895 — that sit atop the grandstands, which remain among the most recognizable architectural features in the world.

What to Wear — The Kentucky Derby has been synonymous with style and glamour from the beginning. Today, it's one of the only places in the world where people still dress to the hilt for a sporting event and where men's fashion is just as important as women's. From fantastic hats and colorful spring dresses to dashing bow ties and seersucker suits, Derby's display of American style and tradition simply doesn't exist anywhere else.

Men — The modern Derby man possesses an unparalleled color palette. Sun-drenched, tropical colors in bold stripes or busy plaid and bright pastels steal the limelight. Although, if you want a more polished look, a classic navy or pinstripe blazer is always in style. But remember, gentlemen: The secret to looking great is confidence.

Women — The Derby is a chance for every woman to express her inner Southern Belle. The race's founder, Colonel M. Lewis Clark, Jr., had a vision for an experience that felt both comfortable and luxurious. Today, a myriad of fashions can be found at Derby – from cool sundresses to simple cocktail dresses and even more formal attire. But all these styles have one thing in common: the big Derby hat. The extravagant hats that have become associated with the Derby did not really come around until the 1960s, when social fashion norms loosened up and the presence of television gave women a reason to stand out. The hats became larger, brighter, and more extravagant. Hats at the Kentucky Derby have become even more popular after the royal wedding in 2011, an event that showcased many elaborate hats and fascinators. [See a tutorial on Derby hats here.](#)

The Apollo Curse — Not since the 8th running of the Derby has a horse won it without the benefit of a start as two-year old. That horse was *Apollo* who came with a late rush to beat *Runnymede* back in 1882. This year, we have not one but two horses looking to knock off the Apollo curse. *Justify* and *Magnum Moon* both come in looking strong and could end this streak. Neither raced last year.

Breeder's Juvenile — While it is a great race to win, the Breeders' Cup Juvenile has not exactly been a harbinger for Derby winners. *Nyquist* is one of only two are the only two who won the Juvenile that also won the Roses. Last year's winner *Good Magic* may be good enough to go the distance.

THE FIELD of 20

Here are some horses in the field that I would look out for:

Magnum Moon (Trainer Todd Pletcher, Rider Luis Saez) – He is 4 for 4 without a start at two, taking the Rebel and Arkansas Derby. He will run in the Kentucky Derby off three weeks' rest. He ran in the Arkansas Derby off a short rest and was bearing out significantly in that race. Three hard races in a relatively short window is cause for concern, especially when you watch the replay of him bearing out in the Arkansas Derby. The added distance doesn't figure to help him, and at times, has shown a lack of maturity which could hurt in a big field. He should prompt the pace if not lead it. It's hard not to like an undefeated horse from the Pletcher barn, with a tough aggressive rider, but he has some negatives that could hurt him, especially if the pace is fast.

Mendelssohn (Trainer Aidan O'Brien, Rider Ryan Moore) – It should have come as no surprise this horse can motor on dirt. His race in Dubai amounted to a public workout. Yes the track was kind to speed and the rail was good but he ran fast, went easily, and by no means needs the front. He's won on turf, synthetic, and on dirt. He's been a mile and 3 sixteenths, that's further than anyone he will face in Louisville. His last win is faster than any in here have run and if he repeats that (or anything close to it) he will be very tough to beat.

Justify (Trainer Bob Baffert, Rider Mike Smith) – It is probably not possible for a colt to be in better hands coming up to the Derby than *Justify* is with trainer (Baffert) and rider (Smith). He's three for three with no starts at two, but only raced at Santa Anita, which is a question mark despite him being the likely favorite at Post time. He has plenty of speed but he doesn't have to be right on the lead. He can stalk and pounce and I suspect that is what Smith will attempt to do. He will likely be the favorite and has had a strong showing during Churchill Downs workouts over the past couple of days, clocking in at 1:13 over six furlongs.

Good Magic (Trainer Chad Brown, Rider Jose Ortiz) – *Good Magic* just won in the Blue Grass and was last year's Breeders' Cup Juvenile champ as a maiden. He has lofty expectations and trained great lately. He will probably sit off a projected fast or even contested pace, but go when called upon. Ortiz is a winning machine and chooses wisely in big races so look out for this one.

Audible (Trainer Todd Pletcher, Rider Javier Castellano) – *Audible* is popular but his pedigree doesn't scream a mile and a quarter. As well, his Florida Derby win had a lot of good Luck in it as he sat off a suicide hot pace and moved into it at the right time to finish the field. Experts worry about his finish. Interestingly, world-class rider John Velazquez won the Florida Derby aboard this colt but jumped off to ride *Vino Rosso*. That should tell you something.

Vino Rosso (Trainer Todd Pletcher, Rider John Velazquez) – Speaking of *Vino*, he looks like a true distance horse (given his breeding) and after a good race in the Wood Memorial, he pulled veteran rider Velazquez off *Audible*. He can sit back and make one run into a contested and probably fast pace. He looks like he put it all together at the right time and should be right there. The worry with *Vino* is he may be already peaking and if he has, it will be difficult for him to win.

Bolt D' Oro (Trainer Mick Ruis, Rider Victor Espinoza) – While fast and talented, he doesn't seem to be as fast and talented as *Justify*. He will need some help from his trip and his experience to turn those tables. It also hurt his chances when Javier Castellano, in search of that elusive first Kentucky Derby win, jumped off this colt to ride *Audible*. Victor Espinoza is a great replacement for the big show, but he hasn't really run faster than he did as a two-years old. That is a little strange and rare. A good pedigree with *Medaglia d' Oro* and *A.P. Indy* makes him one to still keep an eye on.

Noble Indy (Trainer Todd Pletcher, Rider TBA) – The Louisiana Derby winner was somewhat lucky to beat both *Lone Sailor* and *My Boy Jack* in that race. He will face both again along with a host of others. He has speed to be part of the pace or close to it. He doesn't look like the distance will do him any favors. He may be in the mix longer than some think, but likely not at the finish. He will probably struggle with an expected fast pace and the longer distance.

My Boy Jack (Trainer Keith Desormeaux, Rider Kent Desormeaux) – *MBJ* is coming off 3 less than ideal trips starting with a win up the rail in the mud. He ran on the rail (and was not intimidated by it) and likes the mud. He also is a strong finisher as evidenced by his Louisiana Derby finish where he can from far back and was very wide. He is agile, brave and doesn't quit. He has a three race super steady pattern and may be peaking at the right time. He has lots of speed and will likely finish strong. And if there is any bit of rain, he won't mind it wet.

Hofburg (Trainer Bill Mott, Rider Irad Ortiz) – If you are looking for a sleeper, another intriguing colt who lacks seasoning is *Hofburg*. He ran in the Florida Derby where he was wide but never surrendered and kept coming against a much more seasoned and accomplished foe who also got the jump on him. He can easily turn those tables with the race behind him and with the added distance he should relish. It will take a lot of talent to overcome his inexperience but he could be a really good one flying under the radar.

Combatant (Trainer Steve Asmussen, Rider Ricardo Santana) – With an unlucky wide draw in Arkansas, *Combatant* is improving and can rally from off the pace but also not too far off if Santana chooses. He will be long odds but could surprise.

Others: Enticed, Flameaway, Noble Indy, Firenze Fire, Free Drop Billy, Lone Sailor, Bravezo – These are all long shots but if I had to consider them, I might think *Free Drop Billy*, who had a great two-year old year but just hasn't shown anything this year, might be a sleeper. As well, *Brazevo* is trained by D Wayne Lukas and ridden by Gary Stevens and while not as talented, that team has won big surprises before including Oxbow in the Preakness in 2013.

THE PACE

Pace makes the race, and the Kentucky Derby is no exception. It looks like there is enough early speed in this race to insure either a lively pace or possibly a contested one. It is impossible to get a read on this until we see the draw Wednesday morning. Post positions affect jockey strategies and will definitely change outlooks. It is likely *Promises Fulfilled* will likely be the initial pacesetter provided he breaks well. The only other scenario I see at this point is a Mike Smith decision to go if *Justify* breaks well and gets the jump. He probably doesn't want to lead, but will if it there, knowing *Justify* can handle it. *Justify* is inexperienced so a clean ride without a lot of dirt and not having to bounce in the stretch may help him. The pace in the Derby is usually a fast one as the track is likely to be playing fast, especially with the forecast, but once things are out there are a number of pace pressers (*Magnum Moon, Enticed, Flameaway, Noble Indy, Firenze Fire*) all have enough speed to hang. A fast pace does not mean speed can't win if someone is loose and gets brave but it will be hard for the speed to hold at a mile and a quarter if things get contested. Mendelssohn's strength may give him an edge on some or most of the stalkers. We'll know more with the draw on Wednesday and with track conditions on Saturday, but it looks like a closers race on paper unless *Justify* is just too good.

ODDS

Odds to win 2018 Kentucky Derby (5/5/18) - per Sportsbook.ag as of today (4/30/18):

- Justify 3-1
- Bolt D'oro 18-5
- Mendelssohn 9-2
- My Boy Jack 9-2
- Magnum Moon 19-4
- Audible 13-2
- Good Magic 15-2
- Hofburg 10-1
- Vino Rosso 16-1
- Enticed 20-1
- Solomini 25-1

- Noble Indy 28-1
- Flameaway 30-1
- Instilled Regard 35-1
- Free Drop Billy 40-1
- Bravazo 50-1
- Combatant 50-1
- Lone Sailor 50-1
- Promises Fulfilled 50-1
- Firenze Fire 75-1

2018 Kentucky Derby Prediction

I don't like to pick favorites, especially those that are under the Apollo Curse, but my gut says *Justify* is the best and strongest horse in the field. If he is a favorite at 7-2 or higher, I am definitely laying cash there, but I don't expect him to stay there. Anything lower and I'll probably box him up with *Mendelssohn* and *Good Magic* in the Trifecta box and add either *My Boy Jack* or *Magnum Moon* for the Super.

Win: *Justify*

Trifecta Box: *Justify, Mendelssohn, Good Magic*

Superfecta Box: *Justify, Mendelssohn, Good Magic with My Boy Jack or Magnum Moon*

Sleepers: *Hofburg* (10-1) and/or *My Boy Jack* (9-2)

Long Shots: *Free Drop Willy* (40-1) or *Bravazo* (50-1), each worth the \$2 bet

IN THE NEWS

Marathon, Andeavor Connecting – Marathon Petroleum said today it will buy out San Antonio's Andeavor, in a \$23.3 billion cash-and-stock deal, bringing together the second-largest U.S. refiner and a highly integrated marketing, logistics and refining company. The deal will see Marathon swap each Andeavor share for either 1.87 shares of Marathon common stock or \$152.27 in cash; the deal is structured so that about 15% of Andeavor's shares will receive the cash consideration.

Marathon investors will hold about 66% of the company, while Andeavor investors will own the other 34%. The combined company will continue to use Marathon's Findlay, Ohio, headquarters but will maintain an office in San Antonio, Texas, where Andeavor is currently based. Gregg Goff, Andeavor chairman and CEO, said the deal provides value to shareholders now and in the future as part of the combined company. The deal, which is subject to shareholder approval by both company's investors as well as regulatory approval, is expected to close during the second half of 2017.

FAA Legislation Approved – The House approved FAA reauthorization legislation Friday. The must-pass bill includes the Disaster Recovery Reform Act (DRRA), which reforms the Stafford Act. The DRRA clarifies existing assistance programs to speed up inspections and ensure that a percentage of assistance is dedicated to predisaster hazard mitigation. The most important changes to the Stafford Act – which is how we pay disaster assistance – reduces restrictions for mitigation assistance and aims to ensure assistance is provided efficiently. The DRRA also mandates a FEMA guidance enabling cooperation with state and local governments in acquiring "open space" as a mitigation measure. This is significant most everyone agrees that hurricanes in the US are intensifying, both in frequency and in strength. Every year, we seem to be incurring more damage and spending more on repairs. The FAA changes underscore the immediate and demonstrable results of fortifying our structures to withstand the destructive effects of extreme weather events. To that end, researchers at MIT are already tackling this part of the extreme weather calculus. Jeremy Gregory, executive director of MIT's Concrete Sustainability Hub (CSHub), is pushing the frontier of academic research into building materials, with implications for policymakers, building designers, communities, and the vulnerable residents of hazard-prone areas.

CPP Comments Filed – The Electric Reliability Coordinating Council submitted comments on the Clean Power Plan repeal last Thursday as the deadline closed. ERCC argued 1) the CPP went well beyond EPA's Authority under Section 111(d) of the Clean Air Act; 2) CPP is fundamentally inconsistent with the Cooperative Federalism Principles that Congress established in the CAA and other Federal Statutes; 3) the Clean Power Plan is just bad policy because it jeopardizes electric supply and harms consumers while essentially doing nothing to reduce climate change. Finally, ERCC said it supports efforts for EPA to replace the CPP with regulations based on sound legal and economic principles. "Such an effort would provide regulatory certainty, diminish frivolous litigation, and aide the planning efforts of power companies and state utility commissions."

Energy Storage Legislation Introduced – Reps. Steve Knight (R-CA) and Bill Foster (D-IL) have introduced legislation ([H.R. 5610](#)) that would establish a set of concrete innovation goals in the coming years for energy storage technologies. The [Better Energy Storage Technology \(BEST\) Act](#) is modeled after similar “moonshot” initiatives, including John F. Kennedy’s original goal of landing a man on the moon that propelled the U.S. past Russia in the space race. The same type of moonshot goals can be applied to technologies such as energy and battery storage as the U.S. looks to keep up with and surpass China in the global clean energy race. The House bill is similar to [one in the Senate introduced by Sens. Jeff Flake \(R-Ariz.\) and Martin Heinrich \(D-N.M.\)](#)

DOE Announces \$60M for Advanced Nuclear Technology Development – Energy Secretary Rick Perry [announced 13 projects](#) that will receive about \$60 million to support cost-shared research and development in advanced nuclear technologies. The selections — broken down into categories pertaining to nuclear demonstration readiness, advanced reactor development, and regulatory assistance grants — are the first under the Office of Nuclear Energy’s “U.S. Industry Opportunities for Advanced Nuclear Technology Development” effort. The announcement includes \$40 million in DOE funding for NuScale’s small modular reactor design effort and nearly \$5 million for a project to design and license application development for a facility capable of handling [high-assay, low-enriched uranium](#) and production of uranium fuels required for advanced nuclear fleets.

Report: Market, Regulatory Challenges to Pumped Storage Growth – With [WATERPOWER Week](#) upon us, the National Hydropower Association released a new [report](#) that says developing market changes that recognize the energy reliability and security role pumped storage plays and evaluating energy storage technologies based on their abilities to provide key supporting services to the overall electric grid. The report also recommends streamlining licenses for low-impact pumped storage hydropower and developing standard evaluation criteria for all forms of energy storage to better compare and evaluate different types of storage.

Report Looks at Nuclear, Renewables Integration – MIT Energy Initiative and Argonne National Lab teamed up for a report underscoring how nuclear and renewable power can work in tandem under a more diverse and reliable grid. “We find that operating nuclear plants in a more flexible manner, including varying power output to integrate renewable energy and supplying valuable operating reserves and frequency regulation, presents a potential ‘win-win-win,’” MIT’s Jesse Jenkins said. Jenkins and his modeled the benefits of pairing renewable resources with more flexible operation of nuclear power plants in a [recent paper in *Applied Energy*](#). During summer 2015, the team worked on two power systems projects: one on [the role of energy storage in a low-carbon electricity grid](#), and the other on the role of nuclear plants. Linking the two projects, the report uses new sources of operating flexibility to integrate more renewable resources into the grid.

ON THE SCHEDULE THIS WEEK

Offshore Tech Conference Set – The [Offshore Technology Conference \(OTC\)](#) starts today and runs through Thursday at NRG Park (formerly Reliant Park) in Houston. The conference is focused on scientific and technical knowledge for offshore resources and environmental matters. OTC showcases leading-edge technology for offshore drilling, exploration, production, and environmental protection. OTC is the world’s foremost event for the development of offshore resources.

MI Innovation Council to Hold Meeting – Michigan Energy Innovation Business Council holds [its 6th Annual conference](#) today at the Radisson Hotel Lansing at the Capitol. The full-day conference focuses on innovations in advanced energy, as well as get an overview on the latest policy developments. There will be several break-out panels throughout the day featuring dozens of expert panelists. The event brings together leaders in Michigan’s advanced energy industry, utility executives, policymakers, regulators, and others.

Forum to Look at Climate, Conservative Views – The Columbia Center for Global Energy [hosts an event](#) today on conservative prescriptions on climate change. As part of its continuing series “Where Next on Climate?” the Center on Global Energy Policy will host a program focusing on conservative prescriptions to deal with climate change. Dr. Glenn Hubbard, Dean of the Columbia Business School and former chair of the Council of Economic Advisors under President George W. Bush, will offer opening remarks, then lead a panel discussion with our friend Rich Powell of ClearPath, John

Diamond of Rice University's Baker Institute for Public Policy and Lynne Kiesling of Purdue University and R Street Institute.

NHA holds Washington Waterpower Week – The National Hydropower Assn holds Waterpower Week in Washington today through Wednesday. Waterpower Week is comprised of three co-located conferences rolled into one: NHA's Annual Conference, International Marine Renewable Energy Conference (IMREC), and Marine Energy Technology Symposium (METS). This 3-day jam packed event provides you the opportunity to network, learn about legislative and regulatory initiatives, and discuss the issues impacting hydropower and marine energy industry.

Solar Summit Set for SD – GTM's Solar Summit 2018 will be held in San Diego tomorrow and Wednesday at the Hyatt La Jolla. This conference will present deep dives by the top industry executives and thought leaders that will help you navigate the challenges in the market. SEIA's Abby Hopper and former Governor Cal EPA head Terry Tamminen are among the list of speakers.

CSIS to Look at Carbon Pricing – The CSIS Energy & National Security Program will host John Larsen (Rhodium Group; CSIS), Jerry Taylor (Niskanen Center), and Thomas Kerr (IFC) tomorrow to discuss the state of play of carbon markets and pricing around the world. Carbon pricing and emissions trading systems (ETS) have been gaining momentum as tools to reduce greenhouse gas emissions and meet Paris Agreement targets. The majority of OECD countries have a carbon pricing mechanism in place. Despite progress, carbon pricing and ETS only cover approximately 15% of global emissions. The United States is still without a nation-wide carbon price, a politically fraught issue. Ultimately, prices must be significantly higher, and these mechanisms more widely adopted, in order to meet the goals of the Paris Agreement. Whether pricing carbon and ETS will come to meet expectations remains an open question.

Forum to Look at PJM Region Energy Issues – On Wednesday, the Great Plains Institute and Duke University's Nicholas Institute for Environmental Policy Solutions hold an expert workshop for state officials and stakeholders exploring recent energy and environmental policy developments in the PJM region. Federal Energy Regulatory Commissioner Robert F. Powelson will deliver a keynote address. After Commissioner Powelson's keynote, Adam Keech, Executive Director of PJM Market Operations will present on recent developments at the RTO. A panel of state leaders will then react to recent PJM proposals and decisions and present on state-level developments. An industry panel will explore trends in the electricity industry, including recent commitments by utilities to decarbonize their portfolios. A third panel will explore timely environmental issues, from the new tax credit for carbon capture and storage projects to EV charging infrastructure and Virginia's move to link to RGGI.

Forum to Focus on Russian Energy – On Wednesday at 10:00 a.m., the Atlantic Council holds a timely discussion on Russia's energy strategy, the final event in a four-part series on Russia Today and Tomorrow: Internal Strengths and Weaknesses. Russia remains one of the largest oil and natural gas producers in the world. Its economy largely depends on energy exports, with revenues accounting for about a half of the country's federal budget. Dr. Tatiana Mitrova, director of the Energy Center at the Moscow School of Management SKOLKOVO, will be presenting a paper of Russia's energy strategy. This will be followed by a panel discussion which will explore the current state of the energy industry in Russia, as well as its immediate and long-term strategy and the influence of the Russian government that includes our friend Elizabeth Rosenberg of the Center for a New American Security.

JHU Forum to Look at China, Enviro Policies – On Wednesday at 12:00 p.m., Johns Hopkins University's School of Advanced International Studies hosts a forum on Chinese environmental policies. Professor Rui Wang specializes in the public policy analysis for sustainable development, especially on issues related to cities or China. Professor Wang's research appears in the areas of public policy, economics, and natural science and has been covered in the Atlantic, Harvard Business Review, Los Angeles Times and New York Times. He also gave talks at the China Finance 40 Forum, Hong Kong Monetary Authority, Los Angeles World Affairs Council, RAND, World Bank, and numerous academic conferences and institutions. His works on California's local climate actions, China's urban household carbon emissions, and parking in China's cities were cited by the IPCC's Fifth Assessment Report. Professor Wang is the inaugural Johns Hopkins SAIS China Yeung Family Endowed Scholar and a steering committee member of the Johns Hopkins 21st Century Cities Initiative.

NAS to Hold Forum on WIPP – The National Academies of Sciences hosts a public meeting on Wednesday at 2:30 p.m. focused on the disposal of surplus plutonium in the Waste Isolation Pilot Plant in New Mexico.

Forum Looks at Climate – The Wilderness Society hosts “Climate Change and U.S. Public Lands” on Thursday morning at 8:30 a.m. at the National Press Club. The forum is the second of a series of panel discussions aim to give the information, resources and connections journalists need to continue telling in-depth, powerful stories that explore the implications of current and future energy, environment and climate policies. This upcoming panel discussion will dig deeper into the role that U.S. public lands play in the climate change discussions and solution, and the issues that surround it, with topics including: energy production and emissions tracking on public lands; the impact of an energy dominance agenda on the administration’s view of climate change and participation on an international stage; aspects of impacts and adaptation; and carbon storage. Speakers include former Governor of Colorado Bill Ritter, former Deputy Secretary, U.S. Department of Interior David Hayes, *Mother Jones* writer Rebecca LKeber and *WaPo’s* Dino Grandoni.

Forum Looks at Oil in Iraq – The Middle East Institute (MEI) hosts a panel discussion on Thursday at 2:00 p.m. examining options and priorities for improving governance in Iraq, featuring Erin Banco, investigative reporter for the *Star-Ledger* and NJ.com; Alan Eyre (State Department), Omar Al-Nidawi (Gryphon Partners), and MEI Scholar Jean Francois Seznec. The panel will be moderated by MEI’s director for conflict resolution and Track II dialogues, Randa Slim.

IN THE FUTURE

WINDPOWER Set for Chicago – The American Wind Energy Assn (AWEA) will hold WINDPOWER 2018 in Chicago from May 7th to 10th. The industry closed 2017 strong, delivering 7,017 megawatts (MW) of new wind power capacity. That new capacity represents \$11 billion in new private investment. There are now 89,077 MW of wind power installed across 41 states, enough to power 26 million American homes. The wind industry is expected to continue its growth into 2018. WINDPOWER is where the industry comes together to plan for the future and keep this success story growing.

Approps Subpanel to Mark Energy Budget – The House Appropriations Committee’s Subcommittee on Energy and Water Development, and Related Agencies will meet next Monday AT 5:30 p.m. to mark-up the FY 2019 Energy and Water Appropriations Bill.

BP Tech Head to Discuss Global Energy – The Atlantic Council’s Global Energy Center will hold a wide-ranging discussion next Tuesday at 9:00 a.m. about the role of technology in shaping the future of global energy. The energy industry is changing faster than at any time in our lifetime. It faces two huge challenges: firstly, providing more energy than ever before to meet the world’s increasing demand; and secondly, transitioning to a lower carbon future. Drawing upon analysis conducted by BP and its partners, BP’s Technology Head David Eyton will discuss some of the major longer-term signals out to 2050, as well as key findings in transport, power and heat. Eyton’s conversation with Amb. Morningstar will also cover the key game-changing technologies for the energy industry and the challenges we face.

Senate Approps to Host Pruitt – EPA Administrator Scott Pruitt is scheduled to testify the week of May 7th before the Senate appropriations subcommittee that oversees his budget according to Sen. Lisa Murkowski, who chairs the panel.

BPC to Host Panel on Federal Science – The Bipartisan Policy Center will Host a Forum on Tuesday May 8th at 9:00 a.m., looking at federal funding for Fiscal Year 2018 for research and development. Continually developing new scientific knowledge and technologies drives long-term economic growth and creates higher-skilled jobs. BPC will focus its conversation on federal investment in scientific research and innovation and how to maintain America’s economic and competitive edge.

Senate Energy Committee to Look at Puerto Rico – The Senate Energy Committee will convene an oversight hearing next Tuesday at 10:00 a.m. to examine the current status of Puerto Rico’s electric grid and proposals for the future operation of the grid.

Forum to Discuss LNG Study – U.S. Energy Association will hold a forum on Tuesday, May 8th at 10:00 a.m. featuring energy economists at ICF who recently conducted a study for LNG Allies. The study “Calculating the Benefits of US LNG Exports” looked at direct, indirect, and induced value added (\$GDP) and employment from LNG terminals and the natural gas feedstock. The principal author of the ICF report, Harry Vidas, joins Fred H. Hutchison, President/CEO, of LNG Allies to discuss the findings.

EnviroRun Features Amy Harder – Next Tuesday, EnviroRun DC hosts Amy Harder, energy and climate change reporter at Axios. Amy is an energy and climate change reporter at Axios, both in her regular column called Harder Line, and her other reporting for Axios she covers congressional legislation, regulations, lobbying, and international policy actions affecting energy and climate change issues in the United States. She previously covered the same issues for The Wall Street Journal and before that at National Journal. The run begins at 6 PM and we will return to the venue for networking and hear from the speaker at 7:00 pm.

OPIS Looks at West Coast Fuel Supply – OPIS holds a forum in Napa Valley at the Silverado Resort on May 9th and 10th looking at West Coast fuel supplies and transportation opportunities. Industry experts will examine the impact of new players in the Western markets, opportunities that California assets can offer, carbon emissions regulations, renewable fuels, plus get an exclusive technical analysis of West Coast spot market prices.

Forum to Look at Nuclear Challenges – The Center for Climate and Energy Solutions holds a conversation on Wednesday May 9th at GWU’s Lerner Hall at 9:30 a.m. featuring utilities, federal and state policy experts, and industry analysts to discuss solutions to address this question and others. The event will feature a keynote from Ralph Izzo, CEO of PSEG, as well as perspectives on state policy options, environmental and economic impacts, and the federal landscape.

WCEE Forum Looks Congressional Energy Agenda – The Women’s Council on Energy and the Environment (WCEE) will host a forum on Thursday, May 10th at 8:00 a.m. at the American Gas Association to look at the Congressional agenda in the first year of the Trump Administration. WCEE hosts for a wide-ranging conversation over breakfast about Congressional priorities and areas for bipartisan agreement on energy and environment issues. Key Congressional staffers who will offer their insights and opinions on the busy year that lies ahead include Senate Energy’s Chester Carson and Brie Van Cleve, Emily Domenech of the House Science Committee’s Energy panel, House Energy and Commerce Committee’s Energy and Environment Majority Chief Counsel Mary Martin and several others.

CSIS, EPIC to Hold Nuclear Forum – CSIS and the Energy Policy Institute at the University of Chicago (EPIC) will hold a half-day public conference on Thursday afternoon May 24th to address pressing questions in an effort to better understand the potential future of U.S. nuclear power. Nuclear energy faces an uncertain future in the United States as the fuel is beset by fierce competition from natural gas and renewable energy in many markets. Coupled with failure to deliver new projects on time and at cost, along with a public sensitive to operational safety, existing and future nuclear power generation is at risk in the United States.

FERC Chair Headlines EIA Annual Energy Conference – EIA holds its annual 2018 Energy Conference on June 4th and 5th at the Washington Hilton. FERC Chair Kevin McIntyre will keynote the event.

Hydrogen, Fuel Cell Forum Set for DC – The Fuel Cell and Hydrogen Energy Association will be hosting a full-day forum and exposition on Tuesday, June 12 in Washington, D.C. at the Ronald Reagan Building and International Trade Center with leading executives, experts, and policymakers on fuel cell and hydrogen technology. The forum will bring together key federal and state policymakers, including the Department of Energy and White House, as well as the broader environmental, transportation, and energy communities to raise awareness of the benefits of fuel cell and hydrogen technology. This event will precede the Department of Energy’s 2018 Annual Merit Review.

GTM to Host Grid Forum – Greentech Media host Grid Edge Innovation Summit on June 20th and 21st in San Francisco. The event is an energy conference that will examine the energy customer of tomorrow and how new innovative business models are quickly emerging. GTM brings together forward thinking and prominent members of the energy ecosystem and as our research team explores the future of the market. Former FERC Chair Jon Wellinghoff will speak along with many others, including our friends Shayle Kann, Julia Pyper and Stephen Lacey.

Young Professional Program for World Gas Forum Set – The Young Professionals Program (YPP) will hold a special forum during the World Gas Conference June 25-29 in Washington, DC. YPP will provide a great opportunity for promising young professionals in the energy sector to learn from top leaders in the natural gas industry and network with their peers throughout the world. More on this as we get closer.

Clean Energy Forum on Schedule – The 2018 Congressional Clean Energy Expo and Policy Forum will be held on July 10th and brings together up to 45-55 businesses, trade associations, and government agencies to showcase renewable energy and energy efficiency technologies.

FRANK MAISANO

Senior Principal

Ext. **Ex. 6**

Policy Resolution Group