Oil and Gas News Briefs
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Russian attack on Ukraine drives oil past $100 a barrel

(Bloomberg; Feb. 24) – Brent crude surged above $105 a barrel for the first time since 2014 as Russia attacked sites across Ukraine, triggering fears of a disruption to energy exports at a time of already tight supplies. Brent jumped more than 9% after President Vladimir Putin ordered troops into Ukraine. Natural gas in Europe rose as much as 41%. The escalation has spooked a market that was already under stress, as oil supplies fail to keep pace with a vigorous recovery in demand as the coronavirus pandemic recedes.

The OPEC+ coalition, led by Russia and Saudi Arabia, is struggling to restore output quickly enough, prompting some of the biggest market players to warn of higher prices. OPEC+ meets March 2 to decide on April's output. As of Feb. 23, delegates from some of the biggest members were saying that triple-digit oil wouldn't cause them to pump faster. Their current strategy is to add 400,000 barrels a day to the market each month.

It's possible, however, that OPEC increases oil production if there's further escalation over Ukraine, said Carole Nakhle, founder of consultant Crystol Energy. "If they think this will threaten the stability of oil markets, I can see them putting more barrels on the market," she said on a podcast produced by Dubai-based consultant Gulf Intelligence. It would probably be down to the likes of Saudi Arabia and the United Arab Emirates to boost output because many of the group's other members would struggle, Nakhle said.

Oil will probably average $110 in the second quarter of the year if the Ukraine conflict escalates, JPMorgan Chase said this week, before Russia's invasion. The bank sees prices retreating to average $90 at the end of the year. The Biden administration is considering tapping its emergency reserves of oil again in coordination with allies to counter the surge in prices, Bloomberg reported on Feb. 23.

Russia's inability to pump much more tests relationship with OPEC+

(S&P Global Platts; Feb. 22) - OPEC's five-year alliance with Russia is on geopolitical tenterhooks, as the oil-producing bloc warily eyes the Ukraine crisis and the threat of U.S. sanctions, while crude prices hit eight-year highs. But beyond the geopolitics, oil market realities may soon force a reckoning of the relationship anyway. With global oil demand on pace to climb back to pre-pandemic levels this year, OPEC and its Russia-led partners are running out of their ability to keep pace with needed crude production.

The 23-country OPEC+ alliance, which controls some half of global oil supply, has been hiking its quotas every month, but the gap between its targets and actual output has been rising. January saw a quota shortfall of 600,000 barrels per day, according to the latest S&P Global Platts OPEC+ survey, contributing to fears of a supply crunch. That gap looks set to grow further, with many members stymied by declining mature fields, unstable oil infrastructure, an exodus of industry investment or civil unrest.

Russia, which pumped 10.08 million barrels per day in January, may itself exhaust its last 320,000 barrels or so of spare capacity mid-year, S&P Global Platts Analytics estimates. By October, under the OPEC+ accord, Russia is supposed to hit 11 million, a level it has never come close to reaching. Once it is unable to boost output, the country's usefulness in helping OPEC balance the market may be finished.

For now, no signs of a rift between OPEC and Russia are apparent, though a delegate acknowledged the alliance could be coming to a "very critical situation," if Russia is fully tapped out. "Everything is possible," the delegate said, of whether the partnership could be dissolved. As it runs low on spare capacity, Russia's influence on the market will decline. The next few months could prove pivotal in how that marriage proceeds.

Russia supplied 7% of U.S. oil imports in late 2021

(Forbes; Feb. 21) - As tensions rise between Russian and Ukraine, one of the issues being discussed a lot in the West is what a military conflict may do to oil prices. Russia is one of the world’s largest oil producers. According to the 2021 BP Statistical Review of World Energy, in 2020 Russia produced 10.1 million barrels per day of crude oil and natural gas condensate. That was good for second place behind the U.S. at 11.3 million. Saudi Arabia was third at 9.3 million barrels per day.

However, the U.S. also consumes far more oil (17.2 million barrels per day) than Russia (3.2 million) or Saudi Arabia (3.5 million). The net result is that the U.S. is a net importer of crude oil, while Russia and Saudi Arabia are major crude oil exporters. This means that the U.S. economy is more vulnerable to oil price shocks, while higher oil prices are a net benefit to Russia and Saudi Arabia. Various talking heads have suggested there will be a $5 to $20 premium on oil prices if Russia invades Ukraine.

As of late 2021, the U.S. was importing 8.5 million barrels per day of crude oil from all countries. Canada was our top supplier, sending the U.S. 4.5 million. Mexico was second, at 700,000, and then Russia at 595,000. Saudi Arabia was our fourth-largest supplier at 555,000 barrels per day. Thus, Russia supplied 7% of U.S. crude oil imports in late 2021. Replacing that oil will put additional upward pressure on global oil prices, virtually assuring that oil will exceed $100 per barrel if the situation further escalates.

U.S. and allies still doing energy business with Russia — for now

(Bloomberg opinion; Feb. 23) - In the 24 hours after Vladimir Putin signed a decree recognizing two breakaway Ukrainian territories, the European Union, the U.K. and the U.S. bought a combined 3.5 million barrels of Russian oil and refined products, worth more than $350 million at current prices. On top of that, the West probably bought an additional $250 million worth of Russian gas, plus tens of millions dollars of aluminum, coal, nickel, titanium, gold and other commodities.

And that's the way it's going to be — at least for now. The U.S. and its European allies will continue buying Russian natural resources and Moscow will continue shipping them, despite the biggest political crisis between the former Cold War warriors since the collapse of the Soviet Union in 1991. Both sides are aware of the contradictions. The West knows that commodities are a cash cow for Putin, fueling his imperial ambitions thanks, in great part, to ultra-high oil and gas prices, but the allies are also aware of the economic self-harm of cutting imports to zero.

For its part, the Kremlin may be tempted to weaponize its natural resources — which could trigger blackouts in Europe. But it also knows commodity exports are its own economic lifeline. It's the commodities market version of the Cold War doctrine of mutual assured destruction, or MAD. At this point, neither Moscow nor the U.S. and its allies have an economic, political or military interest in weaponizing oil, gas and other natural resources. However, I must emphasize "for now."

Crisis over Ukraine helps to push down price for Russian crude

(Bloomberg; Feb. 22) - Russia's flagship crude traded at one of its deepest discounts in years as traders fret about how the crisis over Ukraine will play out. Trafigura and the trading arm of Lukoil both offered Urals, Russia's largest export grade, at $6.30 a barrel below the regional Dated Brent benchmark. That's the deepest discount in at least 11 years, according to data compiled by Bloomberg. Russian producer Surgutneftgas sold the same crude for delivery to Europe at $6 a barrel lower than the same marker.

They're the latest examples of how sharply the relative value of Russian oil delivered into Europe has slumped over the past few weeks. Traders have been warily watching to see what — if any — major measures the U.S. and its allies take to disrupt the flow of Russia's oil exports. "It seems that after many European refiners went on a Urals buying spree in December/January, those that have a choice are now shying away from Urals," consultant Facts Global Energy wrote in a note.

The weakness in the Russian crude runs counter to much of the rest of the market, which is pointing to extreme levels of strength and higher prices. Urals is also relatively energy intensive to process, again making it less appealing to refiners whose hydrogen costs have jumped because of soaring natural gas prices. In addition, Asian traders were said to be wary of becoming caught up in possible trade sanctions against Russia.

High prices push shale producers back to work in marginal areas

(The Wall Street Journal; Feb. 21) - Spurred by the highest oil prices in years, shale companies are moving drilling rigs back into oil fields that were all but abandoned a few years ago. Private producers are leading an industry return to places like the Anadarko Basin of Oklahoma and the DJ Basin in Colorado, where drilling had almost completely stopped in mid-2020 when the areas became unprofitable because of lower oil prices.

Oil production in these marginal regions isn't expected to move the needle in the global market, which is facing tight supplies, but it could help some oil producers that have lost money in past years. Output in the contiguous U.S. by year-end is expected to increase almost solely from the Permian Basin of West Texas and New Mexico, offset by declines elsewhere, according to energy consultant Wood Mackenzie.

With oil climbing above $90 a barrel, near the highest levels in almost eight years, some peripheral drilling, particularly by smaller companies, is now becoming more feasible even in places like Kansas and Utah, where wells produce far less oil than prolific fields in Texas and New Mexico. The regional revivals show the economic ripple effects when prices surge and mark a turnaround for companies hard-hit by the pandemic.

Putting rigs back to work in the Anadarko Basin wouldn't have made sense when oil was around $45 or lower in 2020, with some companies needing at least $60, or even $80 a barrel, to increase investments, executives said. The average number of active drilling rigs in the basin has surged from the pandemic low of seven to 46, according to energy data analytics firm Enverus. The latest number is several more than the region had before oil prices collapsed because of economic shutdowns in the spring of 2020.

Oil majors on track to spend $38 billion on share buybacks

(Financial Times; London; Feb. 22) - Western energy majors are on course to buy back shares at near-record levels this year as soaring oil and gas prices enable them to deliver bumper profits and boost investor returns. The seven supermajors — including BP, Shell, ExxonMobil and Chevron — are poised to return $38 billion to shareholders through buyback programs this year, according to data from Bernstein Research. Investment bank RBC Capital Markets put the total figure higher, at $41 billion.

That would be almost double the $21 billion in buybacks completed in 2014 — when oil last traded above $100 a barrel — and the highest total since 2008. The plans underscore the strength of companies that are reaping the rewards of a resurgence in energy demand as pandemic lockdown restrictions are rolled back. Banks including Goldman Sachs expect Brent crude to trade at more than $100 this year, with some predicting that if Russia invades Ukraine it will trigger a sharper spike in energy costs.

“The sector is in the best shape it’s been in for a long time,” said Biraj Borkhataria, at RBC Capital Markets. Now the question is the duration of the cycle.” Underperformance of the companies’ shares during the pandemic meant that management felt their shares were undervalued and that buybacks were cheap, he said. Pressure to cut emissions and the uncertainty over future demand has meant that oil and gas companies are also investing less on replacing supply than in the past, leaving more cash for buybacks.

FERC chairman defends new policies on gas line and LNG projects

(S&P Global Platts; Feb. 18) - Federal Energy Regulatory Commission Chair Richard Glick has pushed back on some of the criticism of the policy statements the agency issued Feb. 17 on how it will review gas pipeline and liquefied natural gas projects, saying he "does not have a political agenda to maneuver gas out of our system" or create roadblocks for pipelines. In an interview with S&P Global Platts on Feb. 18, he also expressed the goal of working expeditiously on pending projects in FERC's queue.

The commission voted 3-2 on Feb. 17 to update its 1999 interstate pipeline certificate policies, laying out plans to take a harder look at the public-interest need for projects. It also emphasized that the balancing test to determine whether projects are in the public interest would take into account environmental impacts, including climate change, as well as environmental justice and landowner impacts. FERC also voted 3-2 on interim policy guidance on how it would consider greenhouse gas emissions in its reviews.

Glick responded to early commentary that cast the policies as making it more difficult to develop gas projects. Critics have argued the policies will add multiple new legal hooks on which environmental groups can challenge projects. Glick asserts the effort aims to add clarity and increase the legal durability of FERC's orders after court rulings took issue with the commission's action in past reviews. The new policies also drew warnings that long-pending projects could face further delays, as companies work to supplement the record so that they can pass muster and go through further public comment.

FERC policy changes will subject several gas projects to new scrutiny

(Bloomberg; Feb. 18) - Tellurian’s Driftwood LNG facility in Louisiana and the contentious Mountain Valley Pipeline in West Virginia and Virginia are among dozens of proposed gas projects set to face new scrutiny after U.S. regulators tightened their criteria for approvals. Nearly 13 billion cubic feet a day of new gas pipeline capacity may be subject to the policy changes by the Federal Energy Regulatory Commission, which will now put more emphasis on the environmental impacts of projects as well as examine the demand for and intended uses of the gas being shipped.

The new standards will apply to pending and future projects, including the $6.2 billion Mountain Valley Pipeline and the Spire STL Pipeline in Illinois and Missouri — both of which have faced considerable legal challenges. Also affected: Gas pipelines attached to Tellurian's proposed Driftwood LNG terminal; Kinder Morgan's $262 million expansion of the Evangeline Pass pipeline, expected to supply an additional 2 billion cubic feet a day of gas from Louisiana; and Williams' Regional Energy Access Project, which aims to increase gas flows to the Northeast by 1 billion cubic feet a day.

The policy changes come as intensifying concerns about climate change clash with winter fuel shortages in the Northeast and record liquefied natural exports on the Gulf Coast. In recent years, previous pipeline approvals have been overturned due to climate concerns, resulting in cancellation of the Atlantic Coast Pipeline, PennEast Pipeline, the Pennsylvania-to-New York Constitution Pipeline, and the Pacific Connector in Oregon.

Shell says more investment needed to meet growing demand for LNG

(S&P Global Platts; Feb. 21) - Shell on Feb. 21 called for an increase in investment in LNG supply in order to meet rising demand, especially in Asia, as it warned that a supply-demand gap was set to emerge in the mid-2020s. In its annual LNG market outlook, Shell, the world's largest buyer and seller of LNG, said global trade in the fuel in 2021 rose by 6% year-on-year to 380 million tonnes as many countries rebounded from the economic hit of the pandemic.

It said rising LNG demand, combined with supply constraints, caused natural gas and LNG prices to remain volatile throughout the year. "The volatility emphasizes the need for a more strategic approach to secure reliable and flexible gas supply in [the] future to avoid exposure to price spikes," Shell said. "An LNG supply-demand gap is forecast to emerge in the mid-2020s and focuses attention on the need for more investment to increase supply and meet rising LNG demand, especially in Asia," it said.

Shell said China and South Korea led the growth in LNG demand in 2021. "China increased its LNG imports by 12 million tonnes to 79 million, surpassing Japan to become the world's largest LNG importer." Overall, global demand is expected to cross 700 million tonnes per year by 2040, a 90% increase on 2021 demand, Shell said. "Asia is expected to consume the majority of this growth as domestic gas production declines, regional economies grow and LNG replaces higher-emissions energy sources," it said.

Shell sees progress toward agreement on Tanzania LNG project

(Reuters; Feb. 21) - Shell has made good progress with the Tanzanian government in recent months to advance a possible liquefied natural gas project to tap the East African country's huge gas resources, a Shell executive said Feb. 21. "We have seen some real quick progress over the last year compared to what had been a much slower progress before and we continue to be hopeful that we can take this project all the way through to final investment decision at some stage," said Wael Sawan, the head of integrated gas.

The development of Tanzania's vast offshore gas resources has been held up for years due to delays in government agreements, but Sawan told reporters that some fiscal disputes "have now been resolved." Shell operates Block 1 and Block 4 off Tanzania, with 16 trillion cubic feet in estimated recoverable gas. It aims to develop an LNG project with Norway's Equinor. Equinor operates Block 2, in which ExxonMobil also holds a stake and which is estimated to hold more than 20 trillion cubic feet of gas.

Novatek plans for third Arctic LNG project to start up 2026

(The Barents Observer; Norway; Feb. 21) – Novatek's third liquefied natural gas project in the Russian Arctic is likely to be the Ob LNG facility. It will produce 6.6 million tonnes per year at a development cost of about $7 billion, with production planned for 2026. And it will be built with foreign technology, the Russian newspaper Kommersant reports. The company had considered using Russian-developed technology, but problems with the technology in the fourth train at Yamal LNG made the company change its mind.

Ob LNG will be built on the same model applied in the Arctic LNG-2, with so-called gravity-based structures. The structures will be built at the Novatek yard in Belokamenka near Murmansk, fitted with liquefaction modules and other structures, and towed to Ob Bay when ready. The LNG terminal will be anchored in Sabetta, the same site as Yamal LNG. It will be based primarily on resources of the Verkhnetiuteyskoye and Zapadno-Seyakhinskoye fields, with additional reserves available.

According to Kommersant, French energy major TotalEnergies is interested in joining the project. Total already holds stakes in Novatek's Yamal LNG (20%) and Arctic LNG-2 projects (10%). The Ob project could ultimately include also an ammonium production plant. When all three projects are fully up and running, Novatek's total LNG production capacity in the region will amount to about 45 million tonnes per year.

Exxon, Santos reach gas deal with Papua New Guinea government

(Financial Review; Australia; Feb. 22) - ExxonMobil and its partners have struck a deal with Papua New Guinea's government to develop the P'nyang gas field, ending years of uncertainty about a key part of $20 billion in proposed gas and LNG expansion projects in the country that had stalled amid a row over terms. Exxon had hoped to expand the P'nyang gas field to supply an expansion of its 8-year-old PNG LNG venture, but months of talks failed to reach a deal and negotiations broke down in early 2020.

PNG Prime Minister James Marape had been looking to put in place improved terms for the expansion that would have provided more benefits for the nation, but Exxon balked. Talks between both sides resumed last year, and partner Santos — which holds about a 40% stake in the project — said a landmark agreement has now been reached. The state negotiating team has clinched a government take of 63% under the P'nyang gas field deal, compared with 49% from the PNG LNG project and 51% from TotalEnergies' proposed Papua LNG project, the Prime Minister's Office said on Feb. 22.

The government said Exxon would offload a 12% stake in the venture "at fair market price" to PNG parties, the bulk of which will go to the Western Province and landowners. The project is subject to a final investment decision by the P'nyang participants, but if approved the Exxon-operated project would deliver gas to the PNG LNG plant near Port Moresby. The deal includes several concessions compared with the original agreement, including that up to 5% of P'nyang gas would be made available to support the government's electrification efforts in the Western Province or another region.

Rosneft continues to look at expanding into pipeline gas exports

(Bloomberg; Feb. 22) - Russia's Rosneft aims to develop new natural gas reserves regardless of whether the Kremlin allows the company to export the fuel through pipelines. "We will produce gas at Rospan and Kharampur-Neftegaz irrespective of the export potential," First Vice President Didier Casimiro told reporters, referring to the company's two greenfield sites in western Siberia.

Russia's largest oil producer is targeting 3.5 trillion cubic feet of gas output in 2025, VTB Capital analysts said this month following a meeting with Rosneft executives. If pipeline gas exports are allowed, the Russian producer could access markets in energy-hungry Europe, which has been suffering its worst supply crunch in decades. State-controlled Gazprom has a monopoly on exports of pipeline gas from Russia. Yet President Vladimir Putin has ordered the government, Gazprom and Rosneft to prepare a joint proposal by March 1 on potentially sending Rosneft gas abroad, according to Interfax.

Flows from a Rosneft gas export pilot project would reach around 350 billion cubic feet per year, a mere fraction of Gazprom's shipments to countries outside the former Soviet Union, which last year exceeded 6.5 tcf. The volume would also be just a small share of Rosneft's gas production, which reached almost 2.3 tcf in 2021. Rosneft has been trying to get a toehold on pipeline exports for years, and revived its plans in 2021 as Europe's energy crisis unfolded. Russian law allows producers to export liquefied natural gas under certain conditions, but protects Gazprom's hold on pipeline exports.

[Chinese LNG importer adds storage capacity]

(Reuters; Feb. 21) - China National Offshore Oil Co., or CNOOC, aims to complete by the end of 2023 construction of the world's largest storage tanks at a liquefied natural gas receiving terminal being built in eastern China, it said Feb. 20. CNOOC, one of China's largest importers of LNG, has completed the foundations for six giant storage tanks, each capable of holding the cargo of two standard-size LNG tankers, CNOOC's gas and power group said on its official WeChat account.

Once completed, the expanded storage operation will have capacity to handle an additional 6 million tonnes of LNG per year, almost 300 billion cubic feet of natural gas. The tanks, part of a new import facility CNOOC is building at Yancheng port of Jiangsu province, are in addition to the four slightly smaller tanks built earlier at the same site.

State energy major PetroChina and private gas firm Guanghui Energy each operates an LNG storage facility in Jiangsu, which is China's second-largest gas consuming province after south China's Guangdong. China is the world's biggest LNG importer.

[U.S. depleting natural gas inventories faster than 5-year average]

(Reuters column; Feb. 18) - U.S. natural gas inventories have depleted faster than average this winter despite warmer than normal temperatures, as strong demand in Europe and Asia has boosted exports of liquefied natural gas from the U.S., tightening the market. Working stocks in underground storage have fallen by 1.7 trillion cubic feet since the start of November, according to the Energy Information Administration.

The depletion rate has been the fastest since the winter of 2017-2018 and is significantly above the pre-pandemic five-year average. Inventories are now 289 billion cubic feet (13%) below the pre-pandemic seasonal average, compared with 103 bcf (3%) below the average at the start of November. Inventories have depleted rapidly even though the winter has been significantly warmer than average across the major U.S. population centers, cutting heating demand.

Gas inventories will nevertheless end winter below average across North America and Europe, even assuming pipeline supplies from Russia keep flowing. High levels of injections will be needed to refill depleted storage on both sides of the Atlantic, while still meeting strong import demand from Asia. To rebuild depleted inventories, U.S. gas production will need to keep increasing while consumption will have to be restrained through the spring and summer months, which should keep prices relatively high.

Coal and nuclear plant shutdowns increase Germany’s need for gas

(Bloomberg; Feb. 23) - Germany’s economy minister said the country could do without Russian gas. But that won’t be easy. The industrial powerhouse relies on Russia’s Gazprom for more than half its gas. And if anything, demand will only grow as Germany phases out nuclear and coal-fired electricity. No. 2 gas supplier Norway is pumping at full tilt, and Germany has no terminals to import liquefied natural gas. “Germany have shot themselves in the foot with nuke and coal closures,” Tim Partridge, head of energy trading at DB Group Europe, said Feb. 22. It’s vulnerable when renewable output falls short and gas is in short supply, pushing up prices as seen this winter, he said.

Germany is gradually taking its reactors and coal-fired plants offline as it ditches nuclear and looks to move away from the dirtiest fossil fuel. Burning more gas could help fill that gap. Yet that potentially conflicts with efforts to curb reliance on Russia — and on fossil fuels in general — while plans to start importing LNG face multiple hurdles. Bringing in LNG “will never be enough to replace Russian gas fully,” said Hans van Cleef, a senior energy economist at ABN Amro Bank. “Perhaps they replace it a bit, with longer and more use of coal-fired power plants, but that obviously conflicts with the climate goals.”

Stormy weather boosts Europe’s wind power output

(Bloomberg; Feb. 21) - Wind power is making a comeback in Europe as three storms battered the region the past week, helping ease reliance on fossil fuels just as tensions over Ukraine are running high. Turbines in the European Union generated a record 14.9 terawatt-hours of electricity last week, with Germany producing the most wind power ever on Feb. 20, according to data from research institute Fraunhofer ISE. The spike came as the storms cut power to millions of homes and disrupted air travel in the region.

The surge in wind output is a relief for Europe, which is grappling with an energy crunch and concerns that tensions between the west and Russia over Ukraine could further crimp natural gas supplies. It also represents a turnaround from last year, when low wind speeds forced European utilities to burn more coal — the dirtiest fossil fuel — to keep the lights on. The shift has been so pronounced in Germany that the nation has produced more power from wind this year than from fossil fuels.

More wind power will help ease the market, already coping with several nuclear outages in France and concerns about disruptions to gas flows from Russia. Germany has built 1.5 gigawatts of new wind capacity since 2020, according to Fraunhofer ISE. As more turbines start up, periods of stormy weather will help displace fossil fuel plants, which have higher production costs. Installed wind power capacity in Germany is expected to grow 45% to 91 gigawatt-hours by the end of this decade, according to BloombergNEF.

Attack damages equipment at B.C. gas pipeline construction site

(Calgary Herald; Feb. 18) - RCMP are investigating what is being described as a "organized violent attack" on pipeline workers, police and equipment at a Coastal GasLink drilling site near the Morice River in northern British Columbia. Mounties were called after reports that 20 masked people, some of them wielding axes, had attacked security guards at the gas pipeline work site near Houston, B.C., shortly after midnight Feb. 17. The pipeline construction has drawn protests in the past, but none so violent.

"This coordinated and criminal attack from multiple directions threatened the lives of several workers," TC Energy, the company building the pipeline, said in a statement. "In one of the most concerning acts, an attempt was made to set a vehicle on fire while workers were inside. The attackers also wielded axes, swinging them at vehicles and through a truck's window," the company said. "Flare guns were also fired at workers."

Millions of dollars in damage was done to heavy equipment and construction trailers on the site, according to details provided by police and the company. RCMP officers approaching the site from the Marten Forest Service Road said they encountered a burning blockade of downed trees, tar-covered stumps, wire and boards with spikes driven through them. The 415-mile, $6.7 billion pipeline, which will connect B.C.'s shale gas resources to LNG Canada's export project in Kitimat, is almost 60% complete.

Court defeat prompts administration to delay leasing decisions

(The Associated Press; Feb. 22) - The Biden administration is delaying decisions on new oil and gas drilling on federal land and other energy-related actions after a court blocked the way officials were calculating costs of climate change. The administration said in a filing that a Feb. 11 ruling by a Louisiana federal judge will affect dozens of rules by multiple federal agencies. Among the immediate effects is an indefinite delay in oil and gas lease sales on public lands in a half-dozen states in the West.

The ruling also will delay plans to restrict methane waste emissions from gas drilling on public lands and a court-ordered plan to develop energy conservation standards for manufactured housing, the administration said. The ruling also will delay a $2.3 billion federal grant program for transit projects, officials said.

The judge's ruling blocked federal agencies from using an estimate known as the "social cost of carbon" to assess pollution from carbon emissions by energy production and other industrial sources. The decision blocked the administration from using a higher estimate for the damages that each ton of greenhouse gas pollution causes society, using economic models to capture impacts from rising sea levels, recurring droughts and other consequences. Using a higher cost estimate would make the benefits of tighter emission standards more likely to outweigh the cost of complying with new rules.