

Natural Gas: To Export or Not To Export?

In the previous issue of *Currents*, we examined the economics, politics, and environmental issues associated with the shale gas boom in North America. Currently, U.S. gas producers are victims of their own success — the glut of shale gas on the domestic market has caused prices to fall to unprofitable levels. With the massive volume of gas now available, increasing world energy demand, and the attractiveness of gas as a “cleaner” fossil fuel, the world’s appetite for this fuel is growing. However, gas reserves are unequally distributed across the globe, and many regions have no pipeline access to this resource. Given these factors, together with low domestic and high foreign market gas prices, exporting the fuel as liquefied natural gas (LNG) may be economically appealing to companies willing to make the substantial capital investment. As such, many companies are now developing plans and seeking approvals for LNG export terminals.

Current State of LNG Export Projects in the U.S.

Liquefying natural gas and shipping it (in specially-constructed vessels much like large mobile thermos bottles) have been routinely conducted since the 1960s. To liquefy gas it must first be cleaned and then cooled to about -260°F. LNG takes up about 1/600th the volume of (gaseous) natural gas, making it possible to transport the resource worldwide.

Although LNG export terminals operate in gas-rich countries such as Australia, Indonesia, and Qatar, the U.S., currently, has only one, relatively small, operating export terminal, located in Alaska. The Federal Energy Regulatory Commission (FERC) is reviewing proposals for seven more LNG export terminals in four states (Texas, Louisiana, Oregon, and Maryland). Additionally, developers are considering projects at four other U.S. sites. To date, only one project — Sabine Pass in Louisiana — has received FERC approval and is under construction.



Approved and Proposed/Planned LNG Export Terminal Projects in the Contiguous United States (as of 7/17/2012)

Environmental Considerations

A company proposing to build an LNG export facility must secure a number of environmental approvals and must submit to FERC a series of environmental reports required under the National Environmental Policy Act. These reports must address impacts on water use and quality, air and noise quality, ecological resources, geological resources, soils, and socioeconomics.

FERC is charged with examining the environmental issues associated with not only the export terminal itself, but also pipelines, compressor stations, and maritime vessels associated with the project. As such, FERC can require the project developer to provide additional analyses, including a dispersion modeling analysis of the impact of ship/vessel emissions on ambient air quality.

Some environmental groups have gone on record opposing shale gas fracking and LNG export projects. In fact, the Sierra Club is fundamentally opposed to the use of natural gas, because of its environmental impacts as a fossil fuel. With respect to proposed LNG export terminals, environmental organizations

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FROM THE TRENCHES

Confessions of a Former Regulator

Some of us in consulting once worked for regulatory agencies. In my case, I worked for predecessor agencies to the Texas Commission on Environmental Quality (TCEQ) for approximately 15 years. It is hard to be with the agency that long and not have some good stories to tell.

Case of the Bug Killer

I had been sent out to investigate a fish kill. Most people are probably not aware that fish kills are usually reported on Friday afternoons. You begin your investigation where the fish were reported to be dying and work your way upstream until the fish look OK. In most instances, you can locate a pipe or tributary that is the likely source of the kill. In this instance, a pipeline discharging wastewater from a sewage treatment facility was the culprit. I called the town's wastewater department and reported that I was with the State and would like to inspect their plant. This was a small town in West Texas, and, like a lot of small towns, it had a hard time finding and keeping trained personnel. The operator of the facility had recently attended a training session required to renew his operator license. His facility used what are called trickling filters to treat the wastewater. Trickling filters typically have rotating arms equipped with nozzles that spray the effluent onto rock media. Over time, a green, slimy, biological growth forms on the rocks. And this green slime is what provides the bacteria needed to remove organic constituents from the wastewater. Sometimes a trickling filter can become infested with flies, called, simply enough, "filter flies", or for those more technically inclined, *Psychoda alternata* and *Anisopus fenestralis*. Filter flies don't affect plant operations but are a nuisance to plant personnel and any surrounding neighbors. In the wastewater training program, operators are told to expect these flies and are told how to remove them. They are also taught, in detail, about the biological processes associated with secondary treatment systems, and the teachers often refer to the bacteria in the wastewater as "bugs." Thus, it's possible for the students to confuse "bugs/bacteria" with "bugs/filter flies."

Upon inspecting the treatment plant, I immediately noticed that the rock media in the filters were completely devoid of the slime needed to treat the wastewater. I was also surprised to see the operator smiling at me with pride and asking, "How do you like those rocks? Sure are clean, aren't they?" I asked him what had happened to the green slime, and he replied that he had tried to remove the "bugs" (i.e., the filter flies) in his treatment plant but that the methods he had been taught did not seem to be working (he was correct in that the process for killing the flies involves flooding the filter and it does take a while for it to be successful). Then he noted that, since pesticides kill flies, he had dosed the



trickling filters with pesticides. As he explained it, cleaning the gook off the rocks had an unexpected, but wonderful outcome.

And so another fish kill case was closed, and another regulatory enforcement case was opened.

A Bridge Too Far

The TCEQ collects water samples and flow data on a monthly basis at designated stream monitoring locations throughout Texas. In West Texas, many streams are narrow enough to step across during normal flow conditions and can be over 500 feet wide when it floods. One such stream that I was sent to sample was crossed with a bridge approximately 900 feet long and 50 feet above ground at its highest point. I brought with me the key to the site's USGS stream gauging box, which contained a weight attached to a steel cable that I could lower to the stream surface water below. My goal was to measure the distance to the water surface and compare it to a stream flow graph to estimate the current stream flow. At this location, you had to park at one end of the bridge and walk out to the middle to reach the USGS box. Then you had to bend over the railing, unlock the box, lower the weighted cable, take a reading, compare the reading to the chart (provided in the box), re-wind the cable, and re-secure the box door. Needless to say, your attention is focused on the task at hand and not on anything else. During this particular sampling event I had almost completed my checklist of activities when someone grabbed me by the shoulders from behind and pulled me back from the railing, hollering "DON'T DO IT MISTER!" After getting over my fright, I asked "Do what?," as I turned and looked up into the eyes of a huge Texas Highway Patrolman. "You don't want to jump, son." 🌟

David Sorrells
Senior Project Engineer

Proposed NSPS Threatens Future of New Coal-Fired Electric Generation

Developers of coal-fired power projects face significant uncertainties and challenges in the current regulatory environment because of the number of very stringent rules issued by the Environmental Protection Agency (“EPA”) over the last couple of years. In April, EPA ratcheted the level of uncertainty up a few notches by proposing a new source performance standard (“NSPS”) that would require new coal-fired power projects, which are those projects that did not commence construction before EPA proposed the NSPS, to meet a CO₂ emission limit that is based on the performance of the most recently developed combined-cycle natural gas plants.

If that sounds odd, it is. In setting the NSPS to control greenhouse gas emissions from both coal-fired *and* combined-cycle natural gas units, EPA chose to require new fossil fuel-fired power projects with an electric generating capacity exceeding 25 megawatts to meet an output-based standard of 1,000 pounds of CO₂ per megawatt hour, a standard that, according to EPA, is based on the demonstrated performance of only one type of source — natural gas combined-cycle turbines. In the NSPS context, for the past several decades EPA has established one set of standards for electric utility steam generating boilers, including coal-fired boilers, and separate standards for gas turbines. In combining the boiler and gas turbine source categories for purposes of proposing the greenhouse gas NSPS, by its own admission EPA is departing from its prior practices.

It goes without saying that the NSPS presents real challenges for developers of new coal-fired power projects. To rebut the charge that the NSPS effectively outlaws new coal-fired power projects, EPA takes two positions. First, it alleges that economic drivers, like the low cost of natural gas, are what will preclude construction of coal-fired power plants going forward. Whether that is true or not, the NSPS, if it stands, may very well guarantee EPA's prophecy. Second, EPA takes the position that coal-fired power plants can install carbon capture and sequestration (“CCS”) technology to meet the performance standard. But, by EPA's own admission, that is not economically feasible at this time. For that reason, EPA gives new coal-fired power plants a 30-year compliance period in which these sources can delay operating CCS technology until year 10 if, in the interim, they meet a stringent performance standard that EPA claims can be met by supercritical boilers. This provision optimistically assumes that CCS will be more economically feasible in year 10 than it is presently.

Also unique in the proposed rule is that EPA created a “transitional source” category made up of those power projects that have



received preconstruction permits but that have yet to commence construction. Because those sources are so close to commencing construction and because of their significant investments to date, EPA's thinking goes, it would be inequitable to require them to abandon their plans and install CCS to meet the performance standard. These sources also face significant uncertainty, however. They must commence construction within 12 months of the rule proposal, or else lose their transitional source status. This, even though they have no certainty that the transitional source carve-out will survive rule finalization — in their comments on the proposal, environmental groups have pressed EPA to drop the transitional source category.

The consequences of the proposed rule for coal-fired power projects are profound, and immediate. “New sources” are faced with a dilemma because the technology needed to comply with the proposed NSPS is not economically feasible and has never been demonstrated on a major coal-fired power project scale.

Unsurprisingly the proposed rule has attracted a lot of attention in the industry, and is already being challenged in federal court as six industry parties have filed lawsuits claiming that by proposing the NSPS EPA has taken final agency action over which the court has jurisdiction. It is not clear how these challenges will fare, but it is certain that the development of new coal-fired power projects is in jeopardy while the proposal remains pending. Of course, if EPA ultimately adopts a final NSPS resembling the proposal, a new round of challenges is sure to ensue. 🌸

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News Briefs

national news

Cross-State Air Pollution Rule Vacated by Court

On August 21, the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit vacated EPA's Cross-State Air Pollution Rule (CSAPR). The Court decided that CSAPR violates federal law for two primary reasons: 1) it may require upwind states to reduce emissions by more than their significant contributions to nonattainment in downwind states, and 2) EPA did not give states the opportunity to implement emissions reductions at their respective sources, but instead quantified states' obligations (under the good neighbor provisions of the Clean Air Act) and simultaneously issued federal plans to implement those obligations at the state level. The Court directed EPA to continue administering the Clean Air Interstate Rule (CAIR) until EPA is able to make the necessary changes to CSAPR. For more information, contact Eric Quiat at 512.579.3823 or equiat@zephyrenv.com.

EPA Sued over Regional Haze Retrofit Requirements

On August 30, Energy Future Holdings (EFH) sued EPA in the U.S. Court of Appeals for the D.C. Circuit over EPA's regional haze rule pollution control retrofit requirements, which could go into effect with the vacation of CSAPR. Specifically, EFH argued that they should be able to rely on the provisions of the CAIR emissions trading program as a substitute for having to install best available retrofit technology (BART) on power plant units under the regional haze regulations. EFH further maintained that, under CAIR, electric utilities can achieve cost-effective emissions reductions, but under BART they can be required to install far more costly post-combustion emission controls. For more information, contact Bill Jones at 410.312.7910 or bjones@zephyrenv.com.

Court Strikes Down EPA Air Emissions Source Aggregation Policy

On August 7, the U.S. Court of Appeals for the Sixth Circuit struck down EPA's longstanding policy of considering emissions sources that are located on properties that are distant and non-contiguous as "adjacent," for the purpose of defining the "source" in the context of federal air permitting. The Court held, in this case involving a company's natural gas production

and sweetening operations, that EPA's interpretation of the term "adjacent" is contrary to the plain meaning of the term and is erroneous. In recent years the policy has been applied aggressively to require interrelated oil and gas operations to obtain major new source review (NSR) and federal operating (Title V) air permits. The court decision is immediately effective in only four states (Michigan, Ohio, Kentucky and Tennessee) but will, undoubtedly, be applied in other states that have adopted related policies for permitting oil and gas operations. For more information, contact David Mahler at 410.312.7909 or dmahler@zephyrenv.com.

EPA Partially Stays Effectiveness of Utility Air Toxics Rule

On July 20, in response to petitions by interested parties, EPA issued a partial stay of effectiveness of the final utility Mercury and Air Toxics Standards (MATS), published in February. In concert with this stay, EPA announced that it was granting reconsideration of certain provisions of the rule, including issues related to mercury measurement and the dataset used to establish the new source standards for particulate matter and hydrochloric acid. EPA's action also stays the effectiveness of any monitoring, recordkeeping, and reporting requirements of the new source standards. The stay will remain in place until November 2, and EPA anticipates completing the rulemaking to address reconsideration of issues by March 2013. The ultimate outcome is not expected to substantially reduce the overall impacts of the rule on affected units. For more information, contact Lou Corio at 410.312.7912 or lorio@zephyrenv.com.

Court Upholds EPA's Regulation of Greenhouse Gases

On June 26, the U.S. Court of Appeals for the D.C. Circuit upheld four of EPA's foundational rulemakings for regulating greenhouse gases (GHGs) under the Clean Air Act, including EPA's determination that GHGs may reasonably be anticipated to endanger public health or welfare, and the GHG Tailoring Rule to phase in GHG permitting requirements for major stationary sources. The challenge to these rules was brought by 14 states and several industry groups who argued that EPA's decision-making was arbitrary and

capricious. Pending an appeal to the Supreme Court, EPA and state air pollution control agencies will continue to permit GHG emissions, and EPA will continue with promulgation of GHG standards for major GHG sources. For more information, contact David Mahler at 410.312.7909 or dmahler@zephyrenv.com.

EPA Extends Current Greenhouse Gas Air Permitting Thresholds

On July 3, EPA finalized the third step in implementing the GHG tailoring rule — a rule issued by EPA in 2010 that set GHG emissions thresholds at which permits under the federal Prevention of Significant Deterioration (PSD), NSR and Title V operating permit programs are required for new and existing industrial facilities. Under Step 3 of the rule, EPA has determined that the PSD permitting thresholds that were established for GHGs in Steps 1 and 2 of the rule will be retained and that, at present, state permitting authorities are not sufficiently capable of issuing additional GHG PSD permits that would result from lower permitting thresholds. For more information, contact David Mahler at 410.312.7909 or dmahler@zephyrenv.com.

House Passes “Stop the War on Coal” Bill

On September 21, the U.S. House of Representatives passed the “Stop the War on Coal Bill,” intended to roll back or significantly restrict rules issued by EPA in recent years that adversely affect coal-related employment, mining, manufacturing, and electricity generation. Elements of the bill include elimination of the regulation of GHGs for climate change, restrictions on the regulation of mining under the Surface Mining and Control Act, prohibitions on implementing air toxics standards for coal-fired units, and prohibition on future implementation of CSAPR. In addition, the rule would establish a committee to evaluate the cumulative effects of current environmental regulations on energy production and manufacturing in the U.S. The bill, passed by a vote of 233 to 175, will not make it to the Senate before the elections in November and has been promised a veto by the president. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

Ben Curry Named New EPA Region 6 Administrator

On September 24, EPA chief Lisa Jackson announced the appointment of Ron Curry as Administrator of EPA Region 6 — the EPA office charged with oversight of federal environmental programs in Arkansas, Louisiana, Oklahoma, New Mexico, and Texas. Mr. Curry, formerly New Mexico’s Cabinet Secretary for the Environment, replaces Al Armendariz, who resigned under a

cloud of controversy in April (see July 2012 issue of *Currents*). Prior to Mr. Curry’s appointment, Sam Coleman served as the region’s Acting Administrator. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

EPA Finalizes Changes to Refinery Emissions Standards

On September 12, EPA amended its Subpart J and Ja New Source Performance Standards (NSPS) for petroleum refineries. Originally promulgated in June 2008, portions of the rule applying to process heaters and flares were stayed by EPA three months later in response to petitions for reconsideration. With the September amendment, limits on nitrogen oxide (NO_x) emissions from process heaters now depend on the type of heater, and flares are now addressed as a separate affected facility type with its own suite of standards. The rule changes go into effect on November 13. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

EPA Proposes Changes to Turbine Emission Standards

In response to a petition for reconsideration from the Utility Air Regulatory Group, EPA proposed, on August 29, changes to its Subpart KKKK and GG NSPS for gas turbines and combustion turbines. A primary goal of these amendments is to promote energy efficiency and to realize environmental benefits by facilitating the use of combined heat and power (CHP) and low energy content gas. To achieve these and other goals, the proposal includes changes that would clarify which equipment overhauls, refurbishments, and replacements would be considered “new” or “reconstructed” under the rule by focusing on the turbine itself as the equipment of concern; streamline and simplify requirements for how the rule’s sulfur dioxide (SO₂) standards are met; and change the output-based NO_x emissions standard from a gross-output to a net-output limit. In addition, under the proposed rule, NO_x and SO₂ emission limits would apply to startup and shutdown periods at affected facilities for which construction, reconstruction, or modification commenced after August 29. For more information, contact Bob Breeze at 512.879.3671 or bbreeze@zephyrenv.com.

EPA Extends Deadlines for SO₂ Nonattainment Designations

On July 27, EPA extended, for up to one year, the deadline for area designations with respect to attainment of the 2010 primary SO₂ standard. This extension is a result of EPA’s determination, based in part on public comments, that it did not have sufficient

information to make area designations by the earlier June 2012 deadline. For more information, contact Bill Jones at 410.312.7910 or bjones@zephyrenv.com.

state news

Discovery of Endangered Blind Spider Puts Brakes on Texas Highway Project

In August, biologists discovered a rare and endangered spider — the eyeless Bracken Bat Cave meshweaver — in a natural cave exposed by rains at the \$15.1 million highway underpass project on Loop 1604 in Bexar County. According to Jean Krejca, a biologist at Zara Environmental, the discovery of the tiny troglobite (cave dweller), which has not been seen since 1980, is akin to “stumbling on a new Galapagos Island in terms of the biological significance of the region.” The overpass project, originally scheduled to be completed by summer 2013, has been halted, and the U.S. Fish and Wildlife Service and the Federal Highway Administration are now evaluating the impact of the project on the spider’s habitat. For more information, contact Jennifer Knowles at 512.579.3840 or jknowles@zephyrenv.com.

TCEQ Drafts Revised Standard Permit for Concrete Batch Plants

On August 28, the TCEQ released for public review proposed amendments to its standard permit for concrete plants. The standard permit, which allows permanent, temporary, and specialty batch plants to construct and operate without seeking a full permit, incorporates changes to reflect the use of the latest EPA factors for calculating emissions and to ensure compliance with the ambient air quality standard for fine particulate matter (PM_{2.5}). In addition, the draft permit includes a new daily production limit. The TCEQ anticipates that the revised standard permit will go into effect in late 2012 or early 2013. For more information, please contact Kevin Ellis at 512.879.6647 or kellis@zephyrenv.com.

TCEQ Modifies Methods for Evaluating Environmental Compliance History

On June 27, TCEQ amended its Chapter 60 rules related to the evaluation and use of a regulated entity’s history of compliance with environmental rules. The rule changes, made in response to legislation arising out of the Texas Legislature’s Sunset Review of the TCEQ in 2011, now allow the TCEQ to use new standards for evaluating and using compliance history in its regulatory decisions. In addition the rule changes revise the approach for calculating compliance histories with the goal of providing a more accurate measure of compliance performance and making

compliance history a more effective regulatory tool. The rule changes also provide regulated entities an opportunity to review their compliance histories and propose changes or corrections prior to releases of compliance history information to the public on November 15. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com.

Court Strikes Down EPA Disapproval of Texas Flexible Air Permits

On August 4, the U.S. Court of Appeals for the Fifth Circuit overturned EPA’s disapproval of the Texas flexible air permitting program. In particular, the Court took exception with EPA’s contentions that the flexible permit rules do not prevent sources from avoiding major new source review, when required; that the TCEQ has too much discretion in establishing monitoring, testing, recordkeeping, and reporting requirements in a flexible permit; and that methodologies used to calculate and track compliance with emissions caps are not sufficiently clear. Even with the Court’s action, the TCEQ flexible permitting program will not become an approved part of the Texas plan for implementing the Clean Air Act until EPA takes further action in response to the Court’s remand. Over 100 regulated entities in Texas have either completed or are in the process of completing the “deflexing” of their air permits as a result of EPA’s earlier disapproval of the flexible permitting program. For more information, contact David Cabe at 512.879.6644 or dcabe@zephyrenv.com.

TCEQ Chief Engineer Testifies on Flaws in Federal Air Quality Planning Process

On August 2, TCEQ Chief Engineer Susanna Hildebrand testified before the House Subcommittee on Energy and Power as part of a bipartisan forum on state, local and federal cooperation under the Clean Air Act (CAA), held to address questions about implementation of the CAA, the adequacy of the State Implementation Plan (SIP) process, and the flexibility of the CAA to address local needs. Speaking for the TCEQ, Ms. Hildebrand testified that, while the CAA makes the states responsible for achieving the National Ambient Air Quality Standards (NAAQS), the states, in fact, only have the ability to regulate point sources. As such, they are precluded from regulating mobile sources — the most significant sources of the emissions that cause elevated levels of ozone in the atmosphere. She also stated that the CAA does not address the effect of international emissions transported into the U.S. Further, Ms. Hildebrand criticized the CAA’s imposition of punitive fees on point sources in areas that are not achieving the NAAQS when such sources are not necessarily the cause of the problem. For more information, contact Ed Fiesinger at 281.668.7353 or efiesinger@zephyrenv.com. ☀

Environmental Policy by Lawsuit

As I was reviewing the news briefs for this issue of *Currents*, I was struck by the fact that seven of them are directly related to litigation regarding environmental policy. Environmental policy has always been subject to profound disagreement, but these days it seems like much of it is devolving into legal fisticuffs.

Since the days of the Reagan administration, there has generally been more controversy about the proper balance of power between the Federal Government and the states. Taking one side of the debate have been the “new federalism” advocates, who base their positions on the Tenth Amendment to the Constitution, which states that “the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” As such, they argue that EPA has overstepped the boundaries defined under the Federal Clean Air Act (FCAA) and taken over functions left to the states. In short, they argue that EPA should set the goals and the states should implement them. Advocates for a strong federal role in the protection of the environment counter that air and water pollution don’t recognize state boundaries, and these problems can only be solved by a strong and involved EPA. For example, they tend to support EPA’s Cross-State Air Pollution Rule, which closely regulates air pollution emissions produced in one state and affecting another. Taking the federalist position, however, the U.S. Court of Appeals for the D.C. Circuit struck down this rule in August, remanding it to EPA.

The Supreme Court unleashed a flurry of regulation and litigation when it ruled in *Massachusetts v. EPA* that greenhouse gases (GHGs) are air pollutants that can be regulated under the FCAA. This 2007 case, in which Massachusetts and other petitioners sued EPA for failure to regulate GHGs as pollutants, caught EPA unprepared — EPA had argued that GHGs could not be effectively regulated under the FCAA. Subsequent to the ruling, EPA gamely developed an “endangerment finding” in 2009 that GHGs “reasonably may be anticipated to endanger public health.” The agency followed with the “tailpipe rule” in May 2010 setting limits on GHG emissions from cars and light trucks.

More recently, Texas and other states sued the EPA, contending that EPA’s GHG rules were a “subjective conviction” because they



did not set hard and fast thresholds for unsafe climate change. But in June, the U.S. Court of Appeals for the D.C. Circuit unanimously upheld EPA’s rules, saying that “EPA is not required to re-prove the existence of the atom every time it approaches a scientific question.”

The friction over federalism is particularly acute between Texas and the EPA over GHG permitting (see “When Bureaucracies Collide,” July 2010 issue of *Currents*) with the state’s refusal to implement a GHG permitting program. This has led to the odd state of affairs in which a regulated Texas facility going to the Texas environmental agency for its permit for all non-GHG emissions must turn to EPA Region 6 for a separate GHG permit. Currently, the two agencies are trying to work out a process that both addresses collateral problems this friction causes the regulated community and allows each agency to “save face.”

Admittedly my background is in engineering rather than the law, but I find myself wondering whether we, as a country, can develop fair and effective environmental policy without litigating every rule and statute all the way up to the Supreme Court. Although this may be the only path to correct flaws in the rules, most of the issues are not being resolved in a timely way. And that’s a problem. ✨

Joe Zupan
President

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have raised concerns about equipment design and air emissions controls, ship emissions, lifecycle greenhouse gas emissions, and compliance with air quality standards. The Natural Resources Defense Council, however, supports exporting U.S. natural gas because of the “environmental upside associated with the displacement of coal in China and India.”

Economic Considerations

Earlier this year, the U.S. Energy Information Administration concluded that increased natural gas exports would lead to higher natural gas prices, thereby negatively affecting industrial activity and consumer pocket-books. Utilities and chemical/industrial manufacturers share this concern — the American Public Gas Association stated that the exporting of LNG is not in the best interest of natural gas consumers or the country.

In contrast, some economists believe that exporting LNG will not significantly raise domestic natural gas prices. For example, Dr. Kenneth Medlock III of Rice University's James A. Baker III Institute for Public Policy expects that increased U.S. LNG exports to Europe and Asia (where the price of natural gas is about five times higher than in the U.S.) will lower the price of Europe and Asia-produced natural gas, ultimately reducing U.S. LNG export volumes and slowing domestic gas price increases over the long-term.

So is Exporting Natural Gas a Good or Bad Idea?

Natural gas is a commodity with a big price disparity across different markets. With higher overseas prices,

most U.S. gas producers support increased export of LNG, seeing it as profitable and viewing it as a way to balance the world market — more predictable markets would lead to more informed capital investment decisions. Domestic and industrial users, however, would prefer to keep natural gas captive to the U.S. market, crediting the revival of U.S. manufacturing, in part, to the availability of this low-cost fuel and raw material.

Ironically, the Sabine Pass export terminal will be located next to the site of an import facility constructed in 2008, when the U.S. thought it needed huge amounts of imported LNG. The very fact that import facilities can be idled so soon after their construction illustrates the risks of spending billions of capital to export a commodity, like natural gas, with such price volatility — if the price of overseas gas plummets, the market for U.S. natural gas exports could evaporate. Adding additional uncertainty and cost to the development of an LNG export facility are the very lengthy process (up to five years) for securing all environmental approvals and the real possibility of public opposition. To export or not to export LNG is an important energy policy decision with high economic stakes, and the debate is not likely to be settled anytime soon. ✨

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