THE RAPIDAN GROUP
GLOBAL ENERGY INSIGHT

Senate Energy & Natural Resources Committee
Hearing entitled "How to harness a game-changing resource for export, domestic consumption, and transportation fuel"

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June 19, 2014

Madam Chair and Members of the Committee, my name is Robert McNally and I am the president and founder of The Rapidan Group, an independent energy market, policy, and geopolitical consulting firm based in Bethesda, MD. It is an honor to speak with you today about how to harness our energy bounty to serve our national economic and foreign policy interests.

The tremendous boom in US oil and gas supply has been as unexpected as it has been fortuitous for our economy and national security. Ten years ago, the United States imported two-thirds of its oil and was on track to become a major importer of liquefied natural gas (LNG). But thanks largely to the ingenuity, prowess, and risk-taking of American workers and investors, we have unlocked an enormous new supply of domestic energy and completely reversed these trends.

Last year, the United States emerged as the world's leading producer of petroleum energy, exceeding Saudi Arabia and Russia. EIA reported US natural gas production is up 40 percent since 2006 and hit a record high of 72.7 bcf/d in March.[1] Total proven wet gas reserves are up 46 percent over that same timeframe.

The US shale boom is a tremendous windfall for the struggling American economy. It has boosted jobs faster than any industrial sector and facilitated a period of lower energy price volatility. A recent White House report[2] noted **"**[r]ising domestic energy production has made a significant contribution to GDP growth and job creation. The increases in oil and natural gas production alone contributed more than 0.2 percentage points to real GDP growth in both 2012 and 2013, and employment in these sectors increased by 133,000 between 2010 and 2013." These employment estimates do not include indirect jobs created, which the White House noted, "could be quite large." The White House cited one private estimate that unconventional oil and gas activity contributed a total of 1.7 million direct and indirect jobs in 2012.

Arsenal of Energy

US energy abundance serves our foreign policy interests by turning our country into an "Arsenal of Energy" able to help friends and allies diversify from costly and dangerous energy dependence on countries like Russia and Iran. In the case of natural gas, the striking swing of the US from future importer ten years ago to future exporter now has weakened Moscow's ability to impose high, non-market based prices for natural gas in Europe. In Asia, the prospect of LNG exports is already boosting Japan's bargaining position with LNG suppliers in its long-term contracts.

Aboveground Risks

While future trends in the energy industry depend in considerable part on unforeseeable economic, technological, and geopolitical factors, political and regulatory uncertainty and costs are also

[1] http://www.eia.gov/forecasts/steo/report/natgas.cfm?src=Natural-b2
[2] http://www.whitehouse.gov/the-press-office/2014/05/29/white-house-releases-report-administration-s-all-above-energy-strategy-p

substantial and ought to be much more manageable. As many energy experts and officials have noted, the changed energy landscape should cause policymakers to reconsider, reform, or remove outmoded, restrictive regulations and policies that were instituted over 30 years ago amidst concerns about shortages and declining US energy production. Whatever policy benefit those policies had is debatable, and now they have surely outlived any reasonable purpose.

One of the most important and ripe areas for updating is our policy on energy exports. The United States is the only country that requires companies to obtain a "public interest" permit to export natural gas. It is far from clear what public interest would be harmed by allowing the market to determine how many LNG facilities should be built.

While some opponents claim allowing exports would significantly raise natural gas prices and hurt consumers and gas-intensive industries, most objective economic studies find that an increase in natural-gas prices caused by exports would be relatively small under any likely scenario. The net economic benefits of gas exports outweigh any harm, as the Department of Energy has reaffirmed in its recent LNG approval orders. While the aggregate amount of proposed LNG projects amounts to about one-half of US gas production, only a fraction of this amount will be financed and built.

Fortunately, a bipartisan consensus exists that the current procedural framework for approving natural gas exports should be updated. In Congress, the Administration, and within and among leading think tanks, there is strong support for LNG exports, particularly in the wake of Japan's nuclear crisis and, more recently, Russia's aggression toward Ukraine. DOE has so far approved six conditional permits and one final approval to export LNG to non-FTA countries.

Bipartisan expert studies recommend that Congress neither promote or limit LNG exports or ensure public interest determinations are granted automatically to our treaty allies.[3] A second-best option would be for policymakers to reduce the uncertainties and costs the current process creates. In that vein, I will turn to recent changes in DOE's LNG export approval procedure.

Old and New DOE Public Interest Process

The prior DOE procedure for reviewing applications for LNG exports to non-free trade agreement countries involved first granting a conditional public interest permit and then a final one after a project had cleared environmental permitting under the National Environmental Policy Act (NEPA) process at FERC (in the case of onshore facilities) or the Transportation Department's Maritime Administration (MARAD) for offshore jurisdictions. DOE considered applicants in an order of precedence based mainly on the date it applied to DOE and whether it had begun the NEPA process. DOE pledged to review applications expeditiously, and has been acting on permits with an average eight-week interval.

Additionally, under the prior policy framework, DOE had signaled and the market had largely accepted there would be a "soft cap" of 12 bcf/d of conditional approvals, after which an indefinite pause may take place.[4] Conditional approvals now total 9.27 bcf/d, implying only one to two more projects would be considered before the pause.[5]

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[3] http://www.brookings.edu/research/reports/2012/05/02-lng-exports-ebinger
http://csis.org/event/us-japan-alliance-anchoring-stability-asia

[4] http://www.brookings.edu/research/articles/2014/06/10-doe-approving-lng-export-goldwyn-hendrix
"While DOE never announced a cap of any kind, the fact that the NERA study focused on exports of to 12 bcf/d, and that each DOE order cited this number led analysts to assume that a new study would be required for exports in excess of 12 Bcf/d. DOE's announcement of updated studies to assess the impacts of exports between 12 and 20 Bcf/d appears to confirm this view." Footnote 1.

[5] Op. cit., footnote 2

This old framework was problematic for two main reasons. First, the sequence DOE used to consider project applications disadvantages projects that are down the queue but commercially more likely to be built. With 26 non-FTA applications currently in the queue, that timeline left the review of many projects – in some cases commercially-mature ones already advanced in the NEPA process – more than four years in the future. Second, in short-changing projects that were more commercially and technically viable, investors were concerned these project would never move forward on permitting or experience lengthy delays with the soft cap of 12 bcf/d in place.

DOE's new approach, announced on May 29, contains several positive elements while creating new set of questions and concerns as well. The new process levels the playing field by changing the review sequence from order of filing to emergence from NEPA permitting, while also doing away with conditional permits and only issuing final ones. It recognizes FERC (and MARAD) is and ought to be the main "gatekeeper" for project approvals. Second, it more than tripled headroom under the "soft cap" by counting the final instead of conditional amounts of capacity approved, thus lowering the aggregate under the soft cap from 9.27 bcf/d to 2.2 bcf/d. Moreover, DOE announced it would study the economic impact of LNG exports of up to 20 bcf/d.

However, market participants still have concerns with the new process. First, there is no certainty this process will remain in force and it could be changed again. Second, there appears to be no timeframe for DOE to decide when to grant a final permit once the environmental review has concluded. Third, there are new risks that in the new process obstructionist litigation could increase project delays and uncertainty. When it announced the new procedure, DOE also released two draft environmental reports[6] for public comments. While these DOE reports found no cause for environmental concern, industry analysts and investors worry their inclusion may be used to delay projects in the courts.

Conclusion

While the impact of DOE's new LNG export approval process contains several positive elements, concerns remain, and its overall impact remains to be seen. Going forward, policymakers should act expeditiously to remove outdated, inefficient, and costly barriers to energy production, transportation, and trade in order of our country to realize the full economic and national security benefits of the shale oil and gas boom,

[6] See http://energy.gov/fe/draft-addendum-environmental-review-documents-concerning-exports-natural-gas-united-states and http://energy.gov/fe/life-cycle-greenhouse-gas-perspective-exporting-liquefied-natural-gas-united-states